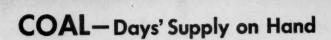
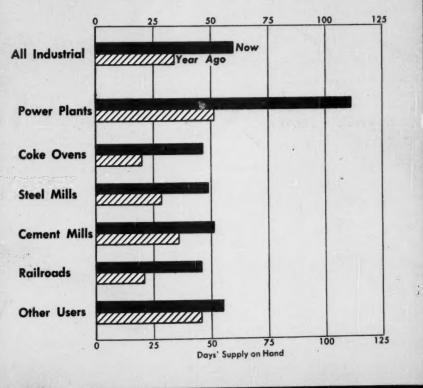
# BUSINESS WEEK





BIG COAL STOCKS: Industry's insurance against (pages 6 and 112)

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YEAR

A McGRAW HILL PUBLICATION

TWENTY FIVE CENTS

# Who profits most from profits?

ABOUT FIFTY YEARS AGO a good many men were going into the business of making automobiles—not to benefit humanity but to make money for themselves.

"Terrible", the reformers said.

Most of these men lost every cent they had, a few made some money. A very few made millions, became extremely rich, built up huge corporations out of profits.

"Terrible", the reformers said.

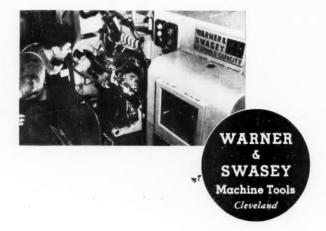
Those huge corporations and the companies

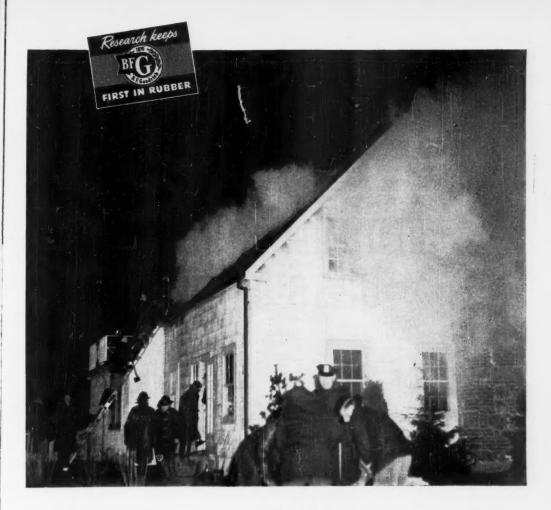
they support and create, provide more than 8 million jobs in America today, for just about the highest paid workers in the world.

Those 8,000,000 jobs would never exist if it had not been possible to make and keep profits in the past.

Profits like that cannot be made today and, even if made, could not be kept. The reformers have had their way.

But the millions of jobs we'll need tomorrow are not being born. That's a terrible price for "reform" that your children will have to pay.





# "Cold steam" puts fires out faster

#### A typical example of B. F. Goodrich product improvement

A IRPLANE crash fires taught firemen they could put out fires 10 times faster with "fog" — water shot from a hose at high pressure. It breaks up into a fine mist and is more smothering to fire. Some firemen call it "cold steam."

But ordinary fire department hose takes about 250 pounds pressure, while to make the best "pea soup" fog, hose might have to stand as much as 800 pounds. B. F. Goodrich engineers set out to design a stronger hose without increasing its weight or making it harder to handle.

In fire hose the rubber tube carries

the water, the cotton cord gives the strength. BFG worked out a method of building the cotton body in this fog hose, that tripled hose strength—did it with an actual saving in weight, without loss of water capacity. The new method of manufacture made possible the first fire hose especially designed for making high pressure fog, that could be used on all kinds of fire department rigs. Nowadays (thanks to this new hose) where there's fire there's apt to be fog—and less loss of life, less damage to property.

Rubber fire hose was the first prod-

uct of the B. F. Goodrich Company. It has been continuously improved since 1870. So have all kinds of water hose, steam hose, air hose, all kinds of hose and belting that industry uses. Today it is literally impossible to buy a B. F. Goodrich product that this policy has not bettered. Your local distributor will be glad to show you many examples affecting the rubber products your business uses. The B. F. Goodrich Company, Industrial and General Products Division, Akron, Ohio.

# **B.F. Goodrich**

# "OLD MILL STREAM" **UP-TO-DATE!** You're looking at one important reason why America-with only 7% of the world's population-accounts for 45% of its electricity. The 41/2 billion kilowatt-hours generated yearly by Hoover Dam (right) are just a small part of U.S.A.'s total power capacity . . . ... a total capacity that provides light and power for over 34,000,000 homes and farms-200,000 industrial plants-keeps our standards of living highest in the world. It's not surprising that 7 of the great turbines at Hoover Dam were built by Allis-Chalmers.\* For Allis-Chalmers is known for quality machinery-unsurpassed workmanship, efficiency, long-life service. Today, the A-C trademark is known in every branch of industry. There's no end to the products of good living it helps produce! Allis-Chalmers Manufacturing Company, 901 South 70th Street, Milwaukee 1, Wis.

#### A-C Helps Build Quality into Products for Good Living . . .

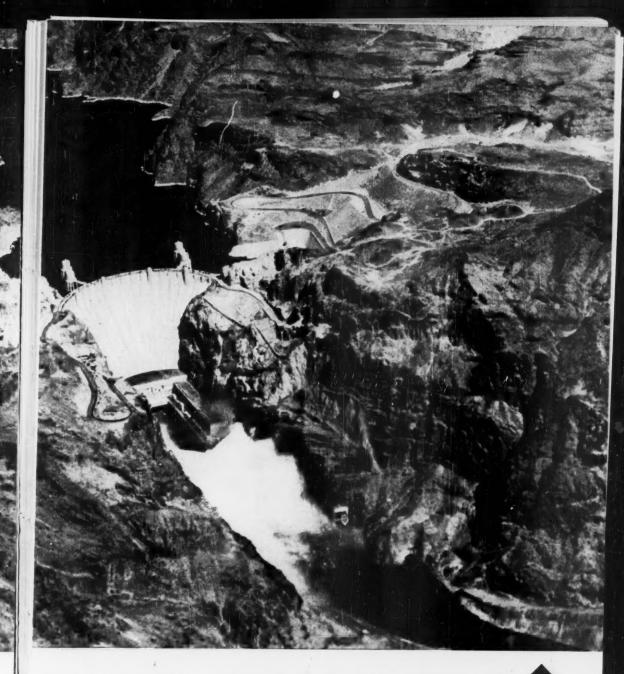


\*More electric power from Hoover Dam! Contracts for two new 115,000 hp turbines and generators were recently awarded to Allis-Chalmers tribute to efficiency of the seven A-C turbines already installed. Portland cement produced in Midwest plant, one of world's largest, is processed by Allis-Chalmers equipment all the way: crushers, screens, kilns, grinding mills, complete power plant, motors and drives.





Paper for newspapers, magazines, books is made cleaner, better, thanks to A-C hydraulic log barkers, chip serens, knotters, feeders, digesters, kilns, heat exchangers, pumps and other pulp-making products. There's hardly a manufactured product today that isn't helped on its way to you by the products and equipment of Allis-Chalmers.

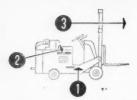


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# here's how Microcastings

# make possible faster, smoother shaves

The MICROCAST Shaver Shafe is a vital part in the shaving mechanism of the Snaboum Shavemanner. This device controls a special cutter which speeds over and back in half circle oscillations with six times greater velocity than blades in other shavers do . . . cossequently, the Shaver Shaft is subjected to extreme hard wear and abook.



#### MICROCASTING SAVES 3 PARTS

The Shaver Shaft is cast of straight chrome steel eliminating expensive machining costs. Formerly this shaft consisted of three parts . . . seather prediction case history in which Austenal MICROCASTINGS, are serving manufacturers by taving them time and money and improving performance of their products.

Procision Castings from High Moliting Point Alloyz That Require Limbs or No Muchioling—The MICROCAST process offers a flexibility in meeting design problems not possible in the past without pyramiding costs. Small parts of intricate shape can now be specified in a whole new range of high melting point alloys which offer advantages of extreme resistance to heat, wear and corrosion.



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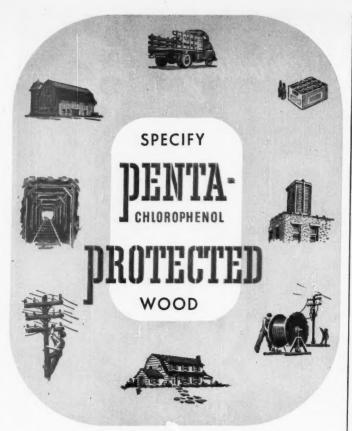
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THE DOW CHEMICAL COMPANY



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#### THE COVER

Last week, John L. Lewis ordered 450,000 miners to stop work for a week. Characteristically, he called no strike—merely a "brief stabilizing period of inaction" which he said was necessary for the stability of the coal industry.

Production by the miners has resulted in "more than adequate tonnage for the domestic and export market." Thus, he said, the industry and the men who get their bread from it are faced with a "menacing instability."

• Full Bins—What does it all mean? Just this: High coal output and slack consumption in recent months have led to some big industrial coal piles. There's enough coal above ground to keep industrial plants running for at least 60 days. And all this comes at a time when Lewis is running into tough opposition from mine operators on contract demands.

Estimates of how much coal there is above ground for industrial use vary from 60-million tons to 70-million tons. A one-week stoppage would cut reserves by about 10-million tons—not enough to cause any big headaches for industry.

• Only a Week?—But will the mines go back into production after one week? You can't overlook the prospect of a prolonged "period of inaction." The one-week stoppage winds up just five days before the miners' paid vacation.

If you can judge by past experience, most miners won't go back into the pits for just five days.

If they don't, you will lose at least 25-million tons from reserves. That means problems for: (1) industries where reserves are lowest, including steel; and (2) companies where reserves fall short of industrial averages.

It goes without saying that that is exactly what Lewis wants. A threat to steel coal reserves would speed up bargaining by "captive mine" operators. And it might improve Lewis' chances for a favorable settlement.

- Story on union negotiations in the coal industry on page 112



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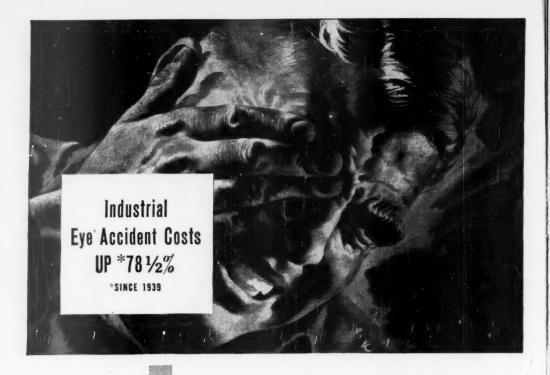
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# You don't need a buyer's market to cut this high cost! You can act NOW!

Your other high costs may or may not be "leveling off" but high eye accident costs are a tax no management need put up with.

Eyes are COSTLY targets when hit by particles that injure and blind. The average cost of a minor eye accident is over seven times the average cost of the goggle that would have prevented the injury. The ECONOMY of this protection is self-evident when it is realized that the cost of the goggle represents far less

than two hours lost in productive time of the worker.\*

Ask your nearest AO Safety Products Representative to show you how an adequate eye protection program works and how much it saves!

\*Average price of goggles \$2.30. Estimated 1949 average hourly earnings of factory workers \$1.41 (Source: U.S. News)



American Optical Safety Products Division

Soutbbridge, Massachusetts
Branches in Principal Cities

# **BUSINESS OUTLOOK**

BUSINESS WEEK JUNE 18, 1949



This business dip, up to now, couldn't have been planned more smoothly.

The slide has been only 10% in six months. Active lines have supported the economy while weaker ones had their shakedowns. There has been little, if any, inventory distress. Prices have never really got out of hand.

Barring upsets abroad and big strikes at home, the total decline should not run too much over 15%—nor should the bottom be too far off.

Automobiles and construction, at the moment, are the two industries doing most to shore up the economy.

Detroit is closing one of the best half years on record. Output of passenger cars and trucks should be around 3.2-million.

Construction dollar volume about matches last year's record to date; actual physical volume probably is a little ahead of last year.

By the time these two industries taper off, some of those hit earlier will be perking up a bit.

Here's one reason that the 1949 "readjustment" is going on in such an orderly fashion: Business cut inventories \$1.2-billion in April.

In April, manufacturers reduced stocks by \$300-million. The other \$900-million was accounted for by wholesalers and retailers.

This spring housecleaning marks the first inventory cut since reconversion. Nobody wants to get stuck. That's healthy.

Psychology has helped minimize this recession. Businessmen have been looking for a slide. So they have played it safe.

Now Washington tells us we are talking ourselves into a downspin. More likely, we have warded off a worse one by looking it in the eye.

Today, businessmen's own decisions have more to do with shaping the economic outlook than at any time since 1940.

For years, things have been more or less out of your hands. First it was the government, placing war orders. Then it was the consumer, demanding all the things he hadn't been able to get during the war.

Finally, it was business, enlarging and improving its production facilities (which was a business decision, to be sure, but one largely forced upon businessmen by consumers).

Now, though, things mostly depend on how many orders you can rustle.

Business—and prices—will swing down farther than is altogether logical before the turn comes.

One reason is the buyer's desire to wait out prices. Another—and it's part of the same thing—is the desire to work off inventory.

Steel and the nonferrous metals are feeling this now. Other lines—cotton textiles, mechanical washers, furniture—felt it earlier.

To them, and many others, this hasn't been a gentle business downswing. Yet, when you average everything up, it has been.

Production of durable goods generally continues down after soft goods

### BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
JUNE 18, 1949

have started up again. It isn't likely we are in for any exception now.

So here you have the full circle: <u>Hard goods have supported the economy in the early stages</u>, and soft goods will shortly start to take up the slack.

Later, probably in the early fall, general buying to replenish inventories will buoy things up as auto output slackens seasonally.

Next year will tell if we can maintain a new-and high-plateau.

Strongest element in the domestic economy is the consumer's willingness and ability to keep on buying.

This has been showing up in the continued high level of consumer spending (BW-Jun.11'49,p10).

That this will keep up is indicated in the latest Federal Reserve analysis of consumer finances (page 19). This study shows that the rank and file still has a bundle of cash and wants the goods it will pay for.

Personal income has held up well despite industrial layoffs and lower farm prices.

The level in April was an annual rate of \$213.7-billion. For the first four months of this year, it averaged \$216.1-billion, 4% above a year ago. April's rate was down only 3.3% from the December peak of \$221-billion.

And bear in mind that this dip in personal income is more than matched by the drop in prices. The Bureau of Labor Statistics index of about 900 wholesale prices, a slow mover, came down 3.7% from December to April.

Consumers will get the benefit of still further price declines.

A sensitive index of spot commodity prices has come down from 300 last December to 230 at the start of this week. If it hadn't been from some stiffening in meats and grains, it would be down even more.

Industry will gradually reap the benefit of lower raw materials costs—after high-priced inventory has been worked off.

An average of 16 industrial raws, which stood near 280 last December, was down to 212 this week. At wholesale, industrial prices (all articles except farm products and foods) have been declining slowly but steadily; these now stand at 145 against 153 late last year.

Stickiness between the spot market and wholesale level reflects two things: (1) Lower spot prices aren't passed along right away, and (2) high cost of labor at various stages of fabrication must be added on.

Copper figures show how consuming plants can live off inventories when prices go into a decline.

Consumers took delivery of only 32,566 tons of the red metal in May. This was down from 76,000 in April and compares with a 1948 average of about 115,000 tons a month (BW-May21'49,p34).

Production, meanwhile, overshot demand by nearly 52,000 tons. That sent producers' stocks up to 128,000 tons at the end of May.

Troubles in our copper market bounced back on one of our good neighbors this week. Anaconda Copper was obliged to slash output of its two big Chilean subsidiaries by 30% due to lack of demand.

One of the many ways that

# industry makes multiple savings with Gulf Quality Oils and Greases:



A cutting oil for hobbing precision gears must have a combination of special qualities to help machine operators step up production and, at the same time, meet requirements for a fine finish on the teeth.

A large New England machine tool manufacturing plant recently made a series of exhaustive tests to determine the most efficient cutting oil for its extensive hobbing operations. Here is the report of the Foreman of the gear cutting department: "Gulf Lasupar Cutting Oil has proved superior to all other cutting oils we tested. With this outstanding cutting oil we increased produc-

tion 40% and get an extremely fine finish!"

Gulf Lasupar Cutting Oil is one of more than 400 Gulf quality oils and greases which are helping plant operating men make multiple savings through improved production and lower costs. Make sure your plant is getting the advantage of recent developments in petroleum science. Write, wire, or phone your nearest Gulf office today and ask a Gulf Lubrication Engineer to call.

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#### INTERNATIONAL HARVESTER

# cuts cost 42%

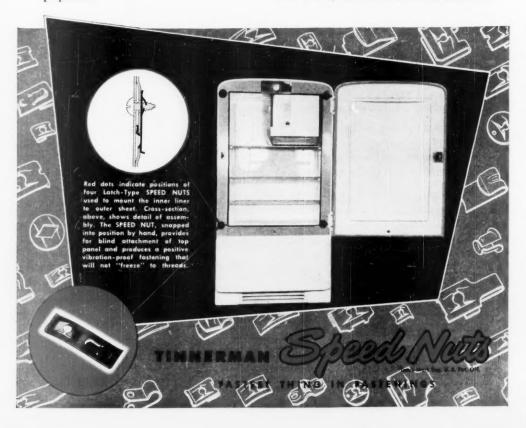
#### **On Refrigerator Application**

When International Harvester used four Latch-Type SPEED NUTS to replace four projected weld nuts on their new refrigerator, these important benefits were gained:

- 1. Cost of fasteners was reduced 24% ...
- 2. Portable welding equipment was transferred to other jobs . . .
- 3. Total assembly savings of 42% was effected! Just this one of the many SPEED NUT applications on this product created a savings of major proportions.

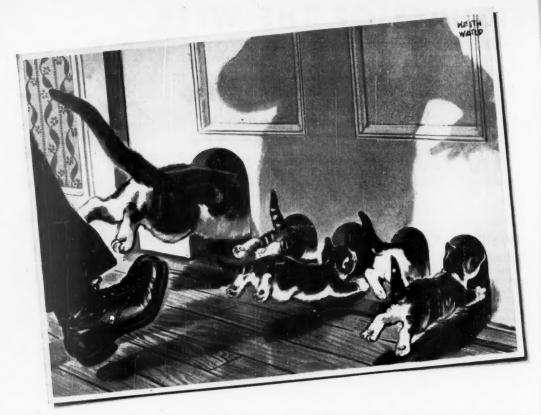
In your search for ways to reduce *your* costs or improve product quality, why not investigate the Tinnerman SPEED NUT brand of fasteners? The complete line includes more than 4000 shapes and sizes.

Let us conduct a thorough Fastening Analysis of your product. Your Tinnerman representative can supply details. He's listed in major city phone directories. Or write: TINNERMAN PRODUCTS, INC., 2040 Fulton Rd., Cleveland 13, Ohio. In Canada: Dominion Fasteners Limited, Hamilton.



# FIGURES OF THE WEEK

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		§ Latest Week	Preceding Week	Month Ago	Year Ago	Averag
Business Week Index (above)		. *183.9	†183.3	187.6	195.3	162.
PRODUCTION						
Steel ingot operations (% of capacity)		86.7	89.1	95.6	96.0	97.
Production of automobiles and trucks		134,714	+98,097	119,634	109,831	98,23
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousand		\$30,162	\$30,464	\$23,499	\$27,217	\$19,43
Electric power output (million kilowatt-hours)		5,300	5,018	5,257	5,132	3,13
Crude oil (daily average, 1,000 bbls.)		4,876 1,861	4,889	4,899 1,867	5,480 2,361	3,8
RADE		2,002	12,002	2,007	2,201	ayor
Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars)		72	72	. 72	84	8
All other carloadings (daily average, 1,000 cars)		59	59	56	68	
Money in circulation (millions)		\$27,484	\$27,515	\$27,452	\$27,864	\$9,6
Department store sales (change from same week of preceding year)		-8%	t-7%	+2%	-4%	+17
Business failures (Dun & Bradstreet, number)		174	165	171	110	27
RICES (Average for the week)						
Cost of Living (U. S. Bureau of Labor Statistics, 1935-39 = 100), April				169.5	169.3	105
Spot commodity index (Moody's, Dec. 31, 1931 = 100)		340.5	340.0	344.2	427.5	198
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 1 Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939 = 1		212.9 295.2	216.8 293.7	230.3	276.2	138
Finished steel composite (Iron Age, lb.)		3.705e	3.705¢	290.2 3.705¢	394.6 3.211¢	146 2.396
Scrap steel composite (Iron Age, ton)		\$20.92	\$21.67	\$22.75	\$40.66	\$19.4
Copper (electrolytic, Connecticut Valley, lb.)		16.775¢	17.625€	18.000€	21.500e	12.022
Wheat (Kansas City, bu.)		\$2.14	\$1.99	\$2.25	\$2.31	\$0.9
Sugar (raw, delivered New York, lb.)		5.85€	5.85€	5.80e	5.24¢	3.38
Cotton (middling, ten designated markets, lb.)		32.95¢	32.61	32.88∉	37.10¢	13.94
Wool tops (New York, lb.)		\$1.598	\$1.552	\$1.575	\$2.011	\$1.28
Rubber (ribbed smoked sheets, New York, lb.)		16.46¢	16.25¢	18.28¢	22.70∉	22.16
INANCE		100.3	1100	110.4	1010	-
90 stocks, price index (Standard & Poor's Corp.)		109.3 3.47%	110.8 3.46%	118.4 3.45%	134.8 3.34%	78. 4.339
		2.71%	2.71%	2.71%	2.75%	2.779
Medium grade corporate bond yield (30 Baa issues, Moody's)		14-13%	14-11%	11-13%	11%	1.009
High grade corporate bond yield (30 Aaa issues, Moody's)				12-14/0	11%	1.00
		11-11%	11-11%	14-11%	1870	
High grade corporate bond yield (30 Aaa issues, Moody's).  Call loans renewal rate, N. Y. Stock Exchange (daily average).  Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).		-		14-14%	1870	
High grade corporate bond yield (30 Aaa issues, Moody's).  Call loans renewal rate, N. Y. Stock Exchange (daily average).  Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).		-	11-11%			
High grade corporate bond yield (30 Aaa issues, Moody's)		11-11%		45,921 62,049	46,996 63,426	††27,77
High grade corporate bond yield (30 Aaa issues, Moody's)		11-11%	11-11%	45,921	46,996	††27,77 ††32,30
High grade corporate bond yield (30 Aaa issues, Moody's).  Call loans renewal rate, N. Y. Stock Exchange (daily average).  Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).  ANKING (Millions of dollars)  Demand deposits adjusted, reporting member banks.  Total loans and investments, reporting member banks.  Commercial and agricultural loans, reporting member banks.  Securities loans, reporting member banks.		1½-1¾% 46,295 61,916 13,415 1,803	46,364 62,336 13,476 2,306	45,921 62,049 13,908 1,829	46,996 63,426 14,152 1,819	††27,77 ††32,30 ††6,96 ††1,03
High grade corporate bond yield (30 Aaa issues, Moody's).  Call loans renewal rate, N. Y. Stock Exchange (daily average).  Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).  ANKING (Millions of dollars)  Demand deposits adjusted, reporting member banks.  Total loans and investments, reporting member banks.  Commercial and agricultural loans, reporting member banks.  U. S. gov't and gov't guaranteed obligations held, reporting member banks.	ks	46,295 61,916 13,415 1,803 34,347	46,364 62,336 13,476 2,306 34,035	45,921 62,049 13,908 1,829 34,111	46,996 63,426 14,152 1,819 35,667	††27,77 ††32,30 ††6,96 ††1,03 ††15,99
High grade corporate bond yield (30 Aaa issues, Moody's) Call loans renewal rate, N. Y. Stock Exchange (daily average). Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).  ANKING (Millions of dollars) Demand deposits adjusted, reporting member banks.  Total loans and investments, reporting member banks.  Commercial and agricultural loans, reporting member banks.  Securities loans, reporting member banks.  U. S. gov't and gov't guaranteed obligations held, reporting member bank Other securities held, reporting member banks.	ks	46,295 61,916 13,415 1,803 34,347 4,473	1½-1¾%  46,364 62,336 13,476 2,306 34,035 4,490	45,921 62,049 13,908 1,829 34,111 4,353	46,996 63,426 14,152 1,819 35,667 4,195	††27,77 ††32,30 ††6,96 ††1,03 ††15,99 ††4,30
High grade corporate bond yield (30 Aaa issues, Moody's) Call loans renewal rate, N. Y. Stock Exchange (daily average). Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).  ANKING (Millions of dollars) Demand deposits adjusted, reporting member banks.  Total loans and investments, reporting member banks.  Commercial and agricultural loans, reporting member banks.  U. S. gov't and gov't guaranteed obligations held, reporting member banks.	ks	46,295 61,916 13,415 1,803 34,347	46,364 62,336 13,476 2,306 34,035	45,921 62,049 13,908 1,829 34,111	46,996 63,426 14,152 1,819 35,667	††27,77 ††32,30 ††6,96 ††1,03 ††15,99 ††4,30 5,29 2,26



#### "EVER HEAR THE STORY ABOUT THE FIVE CATS?"

Jake, our foreman, told us the story the day he found us shooting the breeze on the job. We wanted to know something—and we wanted to know bad. We'd seen an insurance man around the plant, and now some guys were sledging out the wall right in the side of the building. Why? For a door? A door leading nowhere? It just didn't make sense.

"Listen, you guys," Jake said. "Til tell you about that hole—and then you get back to work. Ever hear the story of the five cats? Gent had a cat—and he cut a hole in the side of the wall so the cat could get in and out. Then, like cats do, she had four kittens and he cut four more little holes beside the big one.

"Friend of his said, 'Listen, Joe, you're crazy. One door's enough for them kittens.'

"'Not in this house,' says Joe, "When I say scat, I mean SCAT!'"

Well, we were dumb, I guess. We still didn't get it. "Ever think what would happen if there was an explosion over there in the paint shop?" Jake asks. "You guys would jump a mile—and then you'd start running. But where? Only place you could run is back through the paint shop. See what I mean?"

We saw.

So then Jake says, "Now don't get me wrong. There ain't going to be an explosion. Not with all them ventilators and stuff they've put in. But the old man ain't taking any chances.

So he's sinking fifteen hundred bucks in that door. And for what? To keep you guys safe. Now, will you get back to work?"

You won't find the words, catastrophe survey, in a Workmen's Compensation Insurance policy. Seeing that these surveys are made when needed is just one of the many ways Liberty Mutual is cooperating with management and labor to keep workers safe on the job.



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# WASHINGTON OUTLOOK



"PERIL POINT" is a Republican phrase that the Truman people are picking up. Last year it meant the level below which you cannot cut tariffs without hurting domes-

tic industry.

Now the phrase is coming into use among Truman people. They mean: that level of unemployment above which you dare not go without a stepped-up government works program.

There's no agreement as to what the new peril point is. Economic Council chairman Nourse puts it around 4.5-million. Truman thinks of it as 5-million. Some economists say it's as high as 6-million.

AN "ECONOMIC CONVENTION" to diagnose business conditions and prescribe for its ailments is shaping up.

Sen. O'Mahoney's Joint Congressional Economic Committee plans to call in spokesmen for business, investment groups, labor, agriculture, and the executive branch of government. Time: late

Ouestions to be talked out:

- (1) What can government do to halt unem-
- (2) What can government do to get more private capital into industry?

In preparation, O'Mahoney has enlisted a half-dozen agencies to pull together a rounded perspective of where the economy stands right now —the employment-unemployment pattern, where investment capital is coming from, the impact of buyer resistance, the condition of inventories.

O'Mahoney's program makes him the first Truman stalwart to complete an about-face and embark upon a formal attack on depression. Truman-at least publicly-is still standing fast on his January anti-inflation program.

THE FEDERAL DEFICIT for the fiscal year that ends June 30 will be around \$2-billion.

The deficit was \$2.1-billion at the start of this week. And year-end bill-paying will just about match June-quarter income-tax collections.

Of course, Secretary Snyder's books aren't going to show red ink on June 30. That's because the GOP 80th Congress passed a law that calls \$3-billion of last year's whopping surplus this year's income.

We think you would like to see how federal collections and spending shape up without this bookkeeping gimmick. Here's the picture as of June 10:

										Fiscal billions)	'48
Income				۰					\$34.4	\$38	.3
Outgo								0	36.5	30.	8
Balance									-2.1	7.	.5

Truman, in his January budget message, estimated revenues for the entire fiscal year would be \$39.6-billion, expenses \$40.2-billion, leaving a deficit of \$600-million.

Odds are that expenditures between June 10 and the end of the fiscal year, will just about bring the total up to the Truman estimate; income will fall some \$1.5-billion short of the estimate.

SEN. TAFT has a brand new helper in his campaign for re-election next year; his brother Charley.

Brother Charley is stumping industrial cities of Ohio selling brother Bob's "liberal Republicanism." In the past, the brothers have differed sharply on many a public issue, particularly foreign policy.

COMPLAINTS AGAINST ECA for building up foreign competition are reaching congressmen in increasing numbers from businessmen back home (page 26).

Example: Sen. Ellender waved a letter in Paul Hoffman's face. It was from a typewriter exporter, an Ellender constituent, complaining that ECA-financed foreign production was cutting into his market

Example: Sen. Saltonstall demanded that Hoffman tell him why ECA is sending looms to rebuild European textile mills and thus deepen New England's depression.

These and similar incidents occurred during Hoffman's three-day grilling by the Senate appropriations committee. In all, Hoffman says he has heard from 102 different lines of businesswanting ECA either to help them sell more, or to do less for their foreign competitors.

For the present, this hubbub is not much more than a symptom of the business slide-off here; it won't materially reduce the money Hoffman will get for his second year.

SMALL BUSINESSMEN who want help from ECA in lining up Marshall Plan business should write to Bert H. White, 800 Connecticut Ave. N.W.,

### WASHINGTON OUTLOOK (Continued)

Washington. He's a Buffalo banker and has just taken charge of a new division to see that the little fellow gets a break.

**INSURANCE AND LOBBYING** are next on the investigation docket in Congress.

Both have been talked about ever since this Congress got down to business. Now they are set for the summer recess; they will take over the stage once Sen. Hickenlooper's charges against Lilienthal have been aired, and the B-36 story has been told.

Insurance—A joint committee headed by judiciary chairmen McCarran and Celler is being set up with \$50,000 to spend.

The committee will probe concentration of investment money in the big insurance companies and the distribution of their loanable funds. Possible outcome: a recommendation for some kind of federal regulation.

**Lobbying**—This will be another joint committee affair, under Sen. Kilgore, a dyed-in-the-wool New Dealer.

It will be a harsh review of the loopholes in the Lobby Registration Act—geared to the Truman philosophy that a lobbyist is someone who is against his program. Anti-public housing lobbyists will be first on the griddle.

INDUSTRIAL SUGAR USERS are pressuring Agriculture Secretary Brannan into letting more Cuban sugar into the U.S.

Their argument: Other producers aren't delivering up to quotas they have been allocated. That's creating a shortage, causing prices to inch upward while the food index is trending down.

Brannan's problem: He's got to manipulate the quotas so as to leave domestic beet and cane growers all the market they can handle. If he lifts the lid on Cuban imports too fast or too far, he can cause an embarrassing glut.

This week, Brannan yielded a little. He upped Cuba's allotment 200,000 tons for the year. That will absorb one-third the expected deficit between demand and supplies coming on the market.

THE BRANNAN PLAN for farm prosperity now goes over until next year, officially; that makes it a Democratic campaign issue. At the Des Moines powwow this week, party leaders accepted: (1) the fact that they can't get Brannan's scheme through Congress now, (2) the Republican challenge to put it to the voters.

A TIDELANDS COMPROMISE is in the making—a deal to settle the 12-year-old fuss over who gets the wealth under the water off the U. S. coast.

Speaker Sam Rayburn—a Texan—has gotten attorneys-general from the coastal oil states talking around the same table with Clark of Justice and Krug of Interior. Rayburn wants to get as much agreement as póssible from them before asking Congress to write a law; without substantial agreement Congress won't take up the matter.

The talks to date convince Rayburn there's a chance for legislation, even at this session.

The tidelands fight has been over (1) who owns the off-shore submerged lands, (2) who gets royalties from oil and other minerals taken out, and (3) who grants leases for development.

The question of title has become pretty much a lawyer's argument; the Supreme Court says it vests with the federal government, but the states still would like it.

The Rayburn conterences have about worked out who gets the royalties: States will get two-thirds out to the 3-mile limit, the federal government two-thirds beyond that. Texas, of course, gets two-thirds out to  $10\frac{1}{2}$  miles, because of the terms on which the Republic joined the Union.

There's near-agreement, too, on joint federalstate management of resources development; only Krug is holding out for total federal control. The difference between Clark and the states is over who would have the deciding say-so.

**PRODUCTIVITY IS HIGHER** than you have been led to believe by government figures.

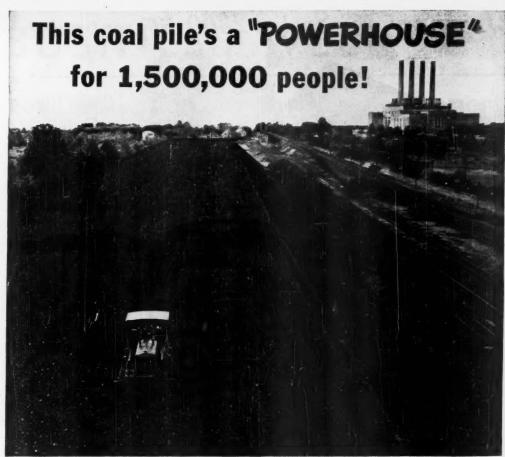
Here's why:

For years, the Bureau of Labor Statistics has been estimating worker efficiency from samplings tied to the number of factory workers shown by the 1939 Census of Manufacturers. Month by month, BLS would adjust the '39 total to take care of the growth of each industry's labor force.

Now the figures gathered in the 1947 Census of Manufacturers are in. And they show that the BLS estimate of employment had grown to be 1,000,000 workers too high.

So, BLS finds it has been dividing total output by about 7% too many workers, getting too low a per-man-hour output figure.

It will take a while yet to get an industry-byindustry breakdown of the BLS error—and for the statisticians to stop blushing.



Photograph copyrighted by The Cleveland Electric Illuminating Company

Here's a picture of a 200,000-ton coal pile—ready to put light and power into homes and work places of a targe city. Pulverized and blown into the steam boilers of an electric generating plant, this coal will help make living and working brighter and easier for a million and a half people.

Indeed, the demand for coal to be used in generating electricity has more than tripled since 1930, in spite of hydroelectric developments and in the face of the fact that electric power companies now "squeeze" three times as much "juice" from a ton of coal as in 1914.

Today coal provides power companies and other users with the most economical, reliable source of energy. And modern mining is geared to build up and maintain stock piles like the one pictured above. To keep the fires of America burning brightly, both now and in the future, the progressive mining industry is spending hundreds of millions of dollars on new and improved mechanized equipment and facilities.

Modernizing America's bituminous coal mines means replacing "pick and shovel" mining with power machines. Today more than 91% of production is mechanically cut and 60% is mechanically loaded. And among many new preparation plants now under construction is one designed to wash and grade coal for specific uses at a record rate of 2,000 tons an hour.

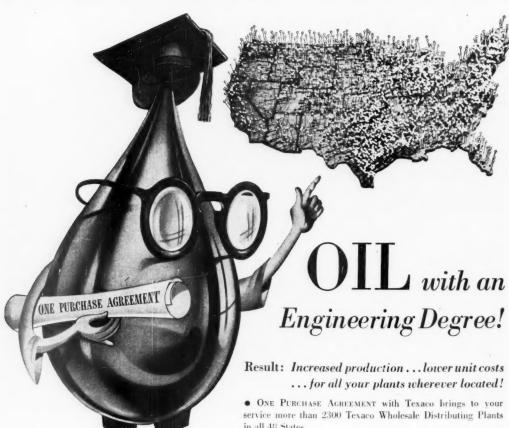
Largely as a result of modernization by progressive management, the American miner's average daily output is five times greater than that of the British miner and his take-homo pay is higher than that paid by any other major American industry.

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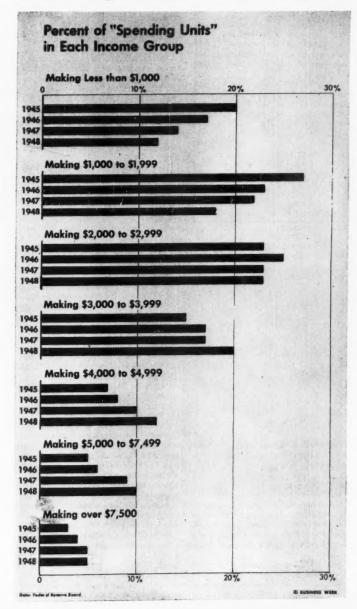
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The Texas Company



# No Depression Among the Consumers



At least not if you believe FRB's survey of what people plan to buy. In January, they wanted a lot, had the money.

Businessmen got the best piece of news this week that they have had in a long time: Consumers still have plenty of money; and they still want plenty of goods. As far as consumers are concerned, the postwar boom isn't over by a long shot.

• Want More—That's the picture that comes out of the Federal Reserve Board's fourth annual survey of consumer finances, released this week. It is a comforting picture for businessmen who have imagined the typical consumer hip-deep in goods and collection letters, too broke and too sated to buy more.

According to the survey, consumers metnd to buy more automobiles, television sets, and medium-priced houses in 1949 than they did in 1948. Their demand for refrigerators, washing machines, furniture, and radios is down a little. But it is still high, even by postwar standards.

• Can Pay More—What's more, consumers are in strong shape financially. They can back up their demands with cash.

About seven out of ten consumer spending units still have a hoard of liquid assets in the form of government bonds or bank accounts. (The survey defines a spending unit as a group of people living under the same roof and pooling their incomes for major expenses.) About half of all spending units were carning higher incomes in 1948 than they were in 1947. And most of these increases went to consumers who had been carning under \$4,000 a year.

In general, the number of consumers in the middle income bracket has been growing. The number in the lower brackets has been shrinking.

• No Breakdown—The Federal Reserve Board's experts carefully avoid pointing any morals, but one conclusion should be obvious to businessmen: The consuming end of the U.S. economy still looks lusty. There is no sign of a general breakdown in the market for major durable goods. And if that is true, then it is very probable that the current

## How Much People Plan to Buy

	Estimated ! of Spending (In Mill)	g Units	expen	erage diture
Automobiles:	Planned Purchases	I ises	Planned Purchases	Actual Purchases
New cars	a not made 3	1 734.0	A MACHINED	
1949	3.6 - 5.1		\$2,060	
1948	3.2- 4.6	3.1	1.860	\$2,130
1947	3.4- 4.5	2.8	1,540	1,950
1946	3.4-3-4.3	1.5	*N.A.	1,620
Used cars				
1949	1.9 - 2.8		710	
1948	1.2 - 2.0	5.6	710	880
1947	1.3 - 1.7	4.5	650	780
1946	1.0- 1.3	3.5	N.A.	630
New and used cars-total				
. 1949	5.5- 5.0		1,600	
1948	4.4- 6.6	8.7	1,540	1.330
1947	1.7- 6.2	7.3	1,300	1.250
1946	4.4- 5.6	5.0	1,100	. 920
Other selected durable good	ls:			
1949	10.2-13.7		340	1111
1948	9.3-12.0	19.8	340	370
1947	8.4 - 11.1	17.2	310	310
1946	11.8 - 14.4	13.2	320	310
Houses:				
1949	2.0 - 3.0		8,200	
1948	1.7- 2.6	2.4	7,400	9,000
1947	2.1 - 3.2	2.2	6,300	7,100
1946	N.A.	2.7	N.A.	5,400

shakedown in business will be only a readjustment and not the beginning of a serious depression.

You have to remember, of course, that the survey isn't the final word on the subject. Consumers can always change their minds. If incomes start to drop sharply, a lot of buying plans will go out the window. In the past three years, the Reserve Board surveys seem to have called the turn on consumer buying remarkably well (table, above). But in a period of falling prices and shrinking incomes, they may not check out so closely.

This year's survey was handled by Dr. Rensis Likert's Survey Research Center at the University of Michigan, which also ran the three previous studies (BW-Jun,5'48,p23). Its conclusions are based on some 3,500 interviews with a carefully prepared sample of the nation's 50-million spending units. The results are comparable with the findings of the previous surveys, but small differences between one year and another may be caused by sampling errors and not by real changes in consumer intentions.

 January, February-Interviews this year took place in January and February. Business was gradually slowing down then, and there had been some important retail price cuts. But talk of a general readjustment in business was only just beginning. The Reserve Board plans to run another check in July to see how much difference the drop in business this spring made.

At the time of the interviews, 55% of all consumers thought that prices were going to go down during the year. But only 5% thought prices would be "a lot lower" during 1949. Some 22% predicted "good times ahead," and another 25% were looking for good times with some reservations. Only 9% expected "bad times ahead," and 16% bad times with reservations.

Few consumers were prepared for any sizable cuts in their own incomes. About 27% expected their incomes to be larger in 1949. Another 46% thought they would come out about the same. Only 17% thought their incomes would be smaller.

Price Hopes—The expectation of continued prosperity and lower prices is an odd combination. Ordinarily, falling prices mean bad times. But in this case consumers apparently think the air can come out of prices without any serious effects on production and incomes.

Nobody knows how consumers will act if things don't work out quite as smoothly as they had hoped. But if they go ahead with the plans they had in January and February, that by itself will do a lot to keep the business boom going.

• Auto Market–Somewhere between 3.6-million and 5.1-million spending units plan to buy a new automobile in 1949. That tops both 1948 plans and

actual 1948 purchases. The price that prospective purchasers intend to pay for their new car seems more realistic than it has been in other years. This year the average consumer expects to pay \$2,060. Last year he paid \$2,130, but at the start of the year he had planned to spend only \$1,860.

There is some evidence that a cut in car prices would bring a lot of new buyers into the market. Among spending units that were uncertain about buying a car, the price was the main reason for indecision.

There's still a high potential demand for used cars, if you can believe the survey, even though this spring the used car market is flat on its back. The number of spending units planning to buy used cars during 1949 runs to 1.9-million to 2.8-million. That is a long way short of actual 1948 purchases. But it's a big jump over 1948 plans. In the previous surveys actual buying of used cars always has run far ahead of plans—partly, of course, because in previous years thwarted new-car buyers settled for a

• Hard Goods—The demand for other durable consumer goods is strong, too. Planned purchases of radios and refrigerators show a small drop from 1948. Furniture and washing machines also are down a shade. These differences could be nothing more than the sampling error, but they probably indicate a little weakening in the markets. Even so, the plans for 1949 are only a little below 1948's record level.

Television is headed for a banner year, if the survey is right. Last year, some 700,000 consumers bought sets. In 1949, 1.4-million plan to deal themselves in on video.

• Houses—Planned purchases of houses am a little ahead of 1948 intentions. Well over a million spending units hope to buy new houses this year. About half of them want to pay less than \$7,000. At least some of these prospective buyers seem to have been unable to find anything at their price: because construction of new homes so far this year has been running behind 1948.

Demand for existing houses is about the same this year as it was in 1948. And some of the buyers who want new houses may settle for older homes when they find they can't get what they want.

• Liquid Assets—Financially, consumers seem in pretty good shape. The number of spending units that have no liquid assets has been growing for the past three years—from 11-million in 1949. But about seven spending units out of every ten still have something salted away. This compares with eight out of

Actually, consumers are probably somewhat better heeled than the survey figures suggest. Interviewers asked about

ten in 1946.

government bonds and bank accounts but they didn't try to find out about holdings of cash because most people won't tell a stranger that they have money in the house. Hence, the definition of liquid assets does not include any currency that consumers might have on hand.

Some of the consumers covered by the survey had inter.ded to buy a particular durable good during 1948 but actually did not. About half of this group said "insufficient income" was the explanation. Around one-fourth said "too high prices." It's worth noting, though that about half of the consumers who had not bought the durable good they had planned did buy some other durable good.

• In the Red-Roughly three out of ten spending units spent more than they received in 1948. They either lived on credit or dipped into savings. This proportion was a little higher than 1947 but not enough higher to mean any-

Consumers leaned a little more heavily on credit in 1948 than they did in 1947. But 59% of those who bought automobiles paid cash in full (including the trade-in allowance). Some 51% of the purchases of other consumer durables were cash sales. And 22% of the home purchases were cash.

# **Exclusive Contracts Ruled Out**

Supreme Court, in Standard of California case, says you can't force distributors to buy only your products. Justice Douglas dissents, says majority opinion will actually promote monopoly.

Do you, as a manufacturer, have exclusive-dealing contracts with your independent retailers? Is the business you do through these retailers as much as 6.7% of your industry's total volume in any market area?

If so, you had better check with your lawyers. You may have to abandon your contract arrangement—set up your own agencies, instead, or open up your own stores

 High-Court Verdict—This is the meaning of the decision handed down by the Supreme Court this week in the antitrusters' case against Standard Oil Co. of California.

It was another 5-to-4 split, but a surprising one. Frankfurter wrote the majority opinion. Jackson wrote a dissent, concurred in by Chief Justice Vinson and Burton. And Douglas—furthest left on the court—wrote a particularly stinging criticism of the majority.

• Narrow View-The court majority took a narrow view of its job in deter-

mining what's legal or illegal under the Clayton act. The section of the act they interpreted says exclusive-dealing contracts are illegal if their effect "may be to substantially lessen competition or tend to create a monopoly." (Exclusive-dealing contracts are those which require an independent distributor to buy certain products from only one manufacturer.)

Standard's contracts with its independent dealers in 7 western states covered gasoline, oil, tires, batteries, and accessories. The 6,000 dealers involved represent 16% of the outlets in that area. Their sales for Standard are about 6.7% of the total business in the area.

The court said, in effect:

Standard's exclusive contracts cover a substantial number of outlets and a substantial amount of the products. Automatically, therefore, competition is substantially lessened—and this is illegal under the Clayton act.

 "Irrelevant"—The court said it didn't have to decide a lot of other questions because they weren't relevant. It said it doesn't make any difference:

• That Standard's share of the total business hasn't increased under the contract arrangement.

 That Standard does not dominate the market.

• That the contracts may be of benefit to the dealer as well as to Standard.

• That competition may have thrived under the contracts.

 That competition may be lessened by the decision—if Standard now sets up agency agreements or buys the stations from its independent dealers.

• Mild Dissent—Jackson, Vinson, and Burton, in their dissent, argued that the mere fact of "quantity coverage" doesn't by any means prove that the contracts actually did lessen competition, or might do so.

Furthermore, said the dissent, the defendant wasn't even allowed to offer evidence to show that there was no illegal effect on competition.

 Sharp Dissent—Douglas in his dissent bitterly summarized the failure of the antitrust laws. "Big business has become bigger and bigger. Monopoly has flourished. Cartels have increased their hold on the nation. The trusts wax strong. There is less and less place for the independent."

Now, the majority, said Douglas, by its decision, promises to wipe out large numbers of independent filling station operators.

Measuring the Unmeasurable for FRB

Rensis Likert, Director of the Institute for Social Research at the University of Michigan, started out to be a chemical engineer, switched to social psychology. But he took with him the chemist's passion for precision and the carefully controlled research methods of the laboratory.

Likert was born in Cheyenne, Wyo, some 46 years ago. His name is Danish, and his odd first name was his grandmother's maiden name. For the past 15 years, his specialty has been measuring the unmeasurable. His doctor's thesis for Columbia in 1932 became a basic work in attitude measurement.

Bombs and Finances—During the war Likert was the director of the morale division of the U.S. Strategic Bombing

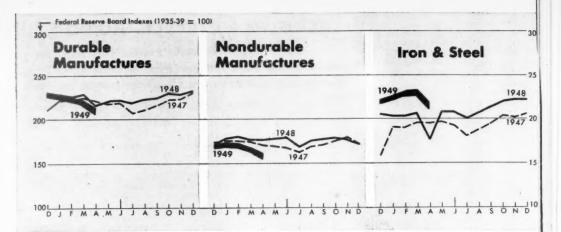
Later his division in Agriculture Dept. started the first survey of consumer finances for the Federal Reserve Board. The following year he took his staff to the University of Michigan and set up the Survey Research Center.

• Why Work—The Federal Reserve surveys are Likert's biggest job so far, but he has an even more ambitious one in the works. With a grant from the Office of Naval Research and contributions from industry, he is running a tenyear study to find out why workers like

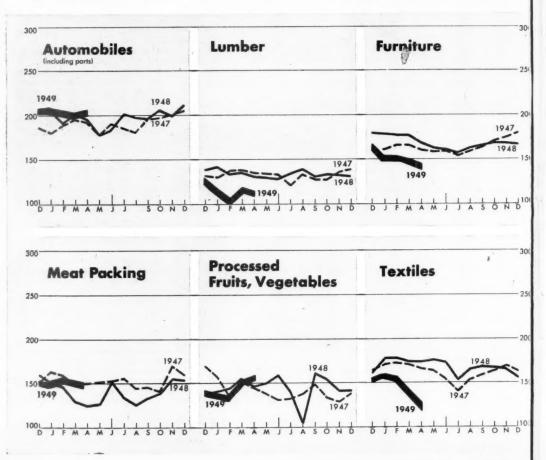


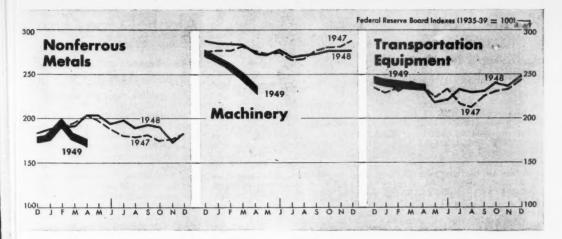
or don't like to work where they work, what makes them work hard or loaf.

The first result of this project—a study of morale among clerical workers at the Prudential Life Insurance Co.—has just come out. It shows that the supervisors who try hardest to get production don't get the best results. The managers who nurse their workers along make a better showing.

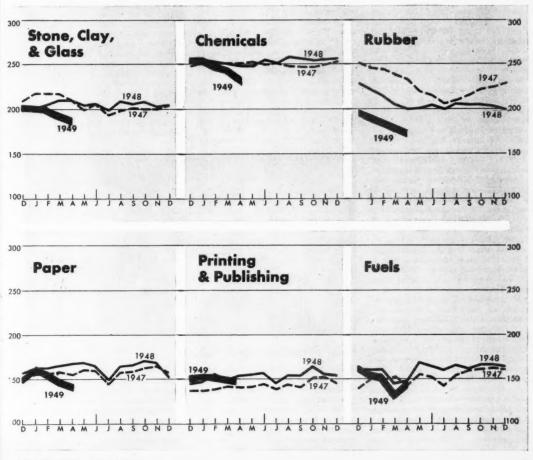


# **Decline in Industrial Production Now**





# Is Showing in Most Lines



- 25

- 250

## Vacation Shift

Trend toward mass closing of plants seems definitely halted this year. Fear of losing business one reason.

Mass vacations—letting all the employees go at one time and locking up the plant—are losing their vogue this year. Blame for this falls on the buyers' market, mainly.

• Trend Halted—In prior years, the trend was all the other way (BW—May29'48,p19). The growth of union contracts with paid-vacation clauses prompted more and more employers to get the vacation problems settled at one lick.

But a BUSINESS WEEK check this week indicates that 1949 will be different from last year.

Reports from the nation's big industrial centers show that many of the plants that closed for mass vacations last year will keep going this summer. They will stagger vacations instead.

Businesses trying the plant-wide shutdown for the first time this year are few and far between.

 Buyers' Market—What is stunting the growth of the all-in-one vacation trend is the return of competition. Mass producers feel they can't afford to shut down, even for a two-week period, because they might miss out on filling new orders.

One of Philadelphia's biggest textile mills, for instance, has had two-week vacation shutdowns for the past six years; but "spotty business conditions" will keep workers on deck this summer.

Another Philadelphia textile producer, Collins & Aikman, says it hopes to shut down for one week this summer—as it has for the last few years. But this plan is subject to last-minute revision because customers these days "want delivery yesterday."

Crook Paper Box Co., North Kansas City, Mo., had a mass vacation in 1948, but not this year. It says that the old staggered vacation plan seems to fit business conditions best now.

• Milwaukee—One of the biggest reversals of plant-wide shutdowns will come this year in Milwaukee. Last summer 120 plants there closed down completely—all at about the same time. The resulting load on Wisconsin resorts brought a howl from operators—and gipes from employees who couldn't get accommodations.

So this summer only 71 companies plan a complete shutdown. The rest are going back to staggered vacations.

• Los Angeles—The Los Angeles are had a record number of mass vacations last year, too. Of 488 companies quer-

ied in a survey, 110 shut down. But there was a special reason: Many of these plants were served by Southern California Edison Co., which closed for a time last summer to make a power cycle change-over.

This year Los Angeles reports about 10% fewer plant-wide shutdowns than

Partial Shutdowns—Among the companies using mass vacations this year, few will lock up their shops completely.
 Buyers' market pressure forces them to keep at least a skeleton force on hand to

service customers.

O'Keefe & Merritt, Pacific Coast range manufacturer, for example, has had a 100% vacation shutdown for the past two years. But, says a company spokesman: "The company like everyone else is fighting for business now, and we can't afford to have any customer dissatisfaction. We found that the 100% vacation shutdown is not good policy." O'Keefe & Merritt will keep skeleton crews in warehouse, office, and maintenance and service departments this year.

• Exception—This year's big exception is Cleveland. Here about 60% of the larger plants expect to close for vacations. In a recent survey by the Cleveland Chamber of Commerce, 222 out of 358 plants reported that they would shut down for a vacation period. Cleveland was one of the first cities to adopt mass vacations. Employers there now think that continuing the plan has more advantages than going back to the staggered system—regardless of business conditions.

## Alcohol Goes Up

Publicker leads pack in first price hike since end of industry war. Boosts range from 8½¢ to 11¢ a gal. for most producers.

Producers of industrial alcohol have decided they have had enough. Enough, that is, of selling at cost or below.

• End of the Red-Ever since the producers stopped counterattacking in their price war (BW-Mar. 749,p106), they have been selling at prices that have kept the industry, as a whole, in the red. Last week, Publicker Industries, Inc., the biggest of the alcohol makers, called a halt to the bargain spree. It jacked prices of its products by 8½¢ to 11¢ a gal. By this week, most of the other producers had either followed suit or were set to soon.

 War and Aftermath—The trouble all started last November when commodity prices began sliding off. Alcohol makers started to cut prices, too. But before they knew it, they found they had placed themselves in the middle of a full-fledged price war.

Pure ethyl alcohol—the base of the industrial type—had been selling at 70¢ a gal. in November. By February, the price had plummeted to 21¢. There it

stopped.

Producers soon found out they had gone too far. But none wanted to be the first to admit it—on an increased price tag. So they sat and fretted while



#### Past, President, and Future

Railroadmen have their own interpretation of this week's shift in top management of the Pennsylvania R.R.: it's the first step in a two-step transfusion of young blood. Martin W. Clement, president since 1935, moves up to chairman; Walter S. Franklin, executive vice-president for the past two years, becomes president. Franklin has been

the driving force behind the giant Pennsy's postwar improvement and modernization program, but he is now 65; and so railroad men are already laying bets on his successor. The Pennsylvania directors gave no hint-left the job of executive vice-president unfilled. Rail men are watching J. M. Symes, vice-president in charge of operations.

they waited for one of the others to act

• Follow the Leader-Publicker stopped the fidgeting. It raised the price of pure ethyl alcohol—the kind used mainly by pharmaceutical firms—from 21¢ to 32¢ a gal., effective July 1. Prices on the company's other formula types went up by 83¢ to 11¢.

Nest day, U.S. Industrial Chemicals, Inc., raised its prices to the Publicker level. (U.S.I.C. had had to write down the value of its inventories by \$4,750,000 out of last year's earnings.) Then Shell Chemical Corp. jumped in. Carbide & Carbon Chemicals Corp., Commercial Solvents Corp., and United Distillers of America, Inc., are pretty sure bets to get in, too.

• No Stocking Up—Despite the fact Publicker made the hike effective July 1, customers won't be able to do much stocking up before the price change. Publicker said that, for the rest of the month, it would cover only "the normal requirements of its customers." It made it clear that it would screen orders carefully to prevent any large-scale stockpiling. The other companies will probably follow Publicker here, too.

#### Pulp Mills Get Caught In Rayon's Doldrums

The troubles that the rayon industry has been having at the sales counters have finally backed up to the pulp mills. You can see that this has happened from the summer plans of Rayonier, Inc. (BW-Jun.11'49,p38).

• Vacation—Rayonier supplies about half of the dissolving pulp used by the nation's rayon industry in the manufacture of viscose and acctate yarns (BW—Nov.29'47.p22). Last week the company closed down two of its Washington pulp mills for long "vacations." Grays Harbor will stay shut for three weeks; Port Angeles won't reopen until sometime in July. A third mill, at Shelton, will close later this month for a couple of weeks.

Rayonier's says that it is doing this to bring production "into line with current rate of orders." What it's up against here can be understood by a glance at the total rayon stocks in the hands of producers (BW—May21'49, p10). Since December, they have climbed from 15.7-million to 70.8-million lb. at the end of May.

• Prices—With this increase in manufacturers' inventories, prices of both pulp and rayon have dropped. Rayonier reduced its pulp prices \$5 to \$12 a ton on June 1. And manufacturers have recently cut viscose filament yarn \$\frac{2}{2}\end{2}\text{ to \$10}\end{2}\text{ a lb., viscose staple yarn about \$2\end{2}\end{2}\text{ a lb.}

Years Beginning July 1	Carryln	New . Crop	Total Supply*	Domestic Use	Experts	Corryout
July 1		(all figure	s in millions of	bushels)	The same	124
1939	250	741	991	663	48	280
1945	279	1,108	1,389	894	395	100
1946	100	1,153	1,253	768	401	84
1947	84	1,367	1,451	766	489	196
1948	196	e1,280	e1,476	e685	e481	e310
1949	e310	1,337(?)	1,647(?)	665(?)	450(?)	532(?

# Wheat Surplus Means Controls

New crop plus carryover estimated at new record high. So acreage and marketing quotas for next year are almost certain. Cut from this year's acreage may be 20%.

Since the end of the war, most farm planning in Washington has been based on what the experts call "abundant production." The merits of the Aiken law, the Brannan plan, and other farm programs are still being debated. But the meaning of "abundant production" of grain has become clear.

It means, simply, that U.S. farmers can grow more grain than they-or the government-know what to do with.

• Record—Coming up is a wheat crop (winter and spring wheat combined) that's estimated at more than 1.3-billion bu. (table). Add that to an estimated carryover on July 1 of 300-million-odd bu., and we will have a total supply of more than 1.6-billion bu. If the estimates turn out to be accurate, that will be the largest supply in history.

Under the 90%-of-parity law, the gov-

Under the 90%-of-parity law, the government's investment in 1948 wheat alone is likely to run to \$550-million (275-million bu, at \$2). No one knows what the cost of supports may be on this year's crop, but if the weather is good and exports fall off, the figure might run to two or three times that. You hear talk on Capitol Hill that total supports on all 1949 crops might even run as high as \$4-billion to \$5-billion.

 Production Controls—It seems clear that such abundant production at such cost can't continue for long. Answer: Let the farmer vote to cut back production—or go without price supports.

The law requires Agriculture Secretary Brannan to offer farmers that taketi-or-leave-it choice whenever total supply gets too high. Exactly what is "too high" is determined by a complicated formula based on estimates of demand; the figure for this year is just under 1.6billion bu.

• Brannan's Position—On June 2, Brannan issued a statement, saying in effect:

The total wheat supply for the 1949-50 marketing season is likely to be 1.6-billion bu. or more. If it is that big, it will be 30-million to 60-million bu. above the level at which I will be forced by law to proclaim this year's marketing quotas.

Actually, Brannan has until July 15 to make up his mind—and in another month, the supply-demand situation could change enough to bring the figure below the critical level. Bad weather here and abroad could certainly have that effect. Or Agriculture might juggle the demand estimates to raise the trigger-figure higher than anticipated supply. Then Brannan would not be forced to proclaim quotas.

• Threat—It's not likely that he will do that, though. After all, there's next year to think of. Suppose he didn't put in controls. Farmers might well grow as much wheat next year as this. Then Brannan would find himself in 1950 with a carryover of 500-million-odd bu. plus a new crop of 1.3-billion-odd bu.—a total of 'over 1.8-billion bu.

That's an even larger amount of wheat than we have now-and we already have too much.

 Acreage Cut—So Brannan will chose the alternative. And his figures show that 1-billion bu, is all the wheat we should grow for 1950. On the basis of average yields for recent years, that would mean a cut in wheat acreage from this year's \$1-million acres to about 65million—roughly 20%.

Brannan han't announced any specific acreage figures yet. But he did say, in his June 2 statement, that the statistics "point up the almost unavoidable conclusion that it will be necessary to bring about a substantial reduction in the wheat acreage planted for harvest in 1950."



#### Head Office-Down by the River Front

United Engineering & Foundry Co., big maker of rolling mill machinery, got too big for its rented-office boots, built this snappy headquarters. For the site the company moved "across the tracks" to Pittsburgh's Allegheny River front, put up the \$1.7-million building in the heart of a dingy warehouse and parking lot district. Visitors who got inside the functional facade at an open-

ing house party last week found an efficient interior. Main offices have movable steel partitions, tile floors, fluorescent lighting. The flat roof will hold about an inch of water for summer cooling. U.E.F. thinks others may follow it out of skyscraper offices to low-height structures like this one. And newly beauty-conscious Pittsburgh hopes they will.

# Tariff Trouble for Truman

Business worries stir up old fight for protection as deadline nears for Reciprocal Trade Agreements Act. Administration, stressing Marshall Plan stake, wants to keep rates low.

The first real tariff fight in years is building up in Congress.

Waiving the hatchet are the lawmakers who are worried about the droopy look of American business. They've felt pressure from manufacturers, mining interests, and farmers who want assurance that foreign goods aren't going to cut deeply into their sliding market.

Holding the fort is the Administration. Truman and ECA insist that freer trade—both for Europe and the U.S. go hand in hand with Marshall Plan aims (BW—May7\*49.p21). Truman's people want tariffs kept at least as low as they are now.

The row has already flared up in the wrangling over the renewal of the Reciprocal Trade Agreement Act. It's a foregone conclusion that Congress will extend the program before it expires on June 30. But what form the renewal will take is what the scrap is about.

 Peril and Escape—Last year the Republicans wrote into the extension bill a clause that gave the Tariff Commission the right to fix the point below which it thought tariff cuts would imperil business. The clause made the commission—and Congress—watchdogs over the President's exercise of tariff-bargaining powers.

Sen. Eugene D. Millikin and his G.O.P. colleagues want this "perilpoint" clause kept in. The White House and the State Dept. don't. They look on the clause as an opposition device to hamstring their authority. And they feel the peril points aren't needed. They say the "escape clause" of the reciprocal trade agreements program is enough to protect domestic business.

The escape clause provides that the President can change or cancel a tariff concession if it hurts—or threatens to hurt—a U. S. producer. The clause now applies to about 24 countries that supply about 80% of our dutiable imports.

• Untried—Actually, this part of the law has never been put to test. Since it

went on the books, U.S. farmers and manufacturers have been able to sell just about everything they could turn out. Thus, only eight applications for relief have come through so far. Only one—involving spring clothes pins—has reached the stage of formal investigation by the Tariff Commission (BW—Jun.11'49.p16).

Publicly, the Administration has always held out the escape clause as a safety valve. Privately—and in negotiations with foreign countries—the State Dept. has made it clear that the government would use the clause sparingly, only in case of "emergencies."

So you can expect the Administration to lean over backwards to avoid using the clause. That's why the opposition wants to keep the peril-point provision in the law

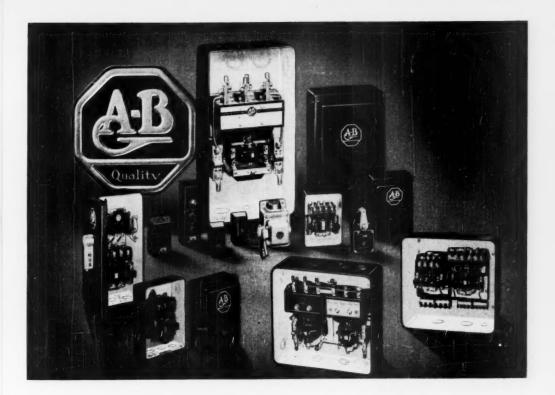
• Marshall Plan—The Administration will justify its stand on the clause by stressing the danger of losing the "tremendous investment" the U. S. has already made in world recovery. It will use again the argument that trade agreements as they now stand are closely tied in with the success of the Marshall Plan. And Truman's people make this point with some cold statistics:

Last year, Marshall Plan Europe exported about \$1-billion worth of goods to the U.S.; it imported from us about \$4.3-billion. That left a deficit of \$3.3-billion, most of which was financed by FCA.

Both Europe and the U.S. would like to keep our exports moving to Europe at about the present level. That leaves the deficit problem. To close the gap, once the Marshall Plan ends, the U.S. would have to increase its imports by around \$3-billion. That obviously isn't in the cards. But the policymakers would like to see some of the gap closed. And if Congress begins pulling back concessions under the peril-point clause—which actually means higher tariffs—you can just about write off Europe's chance of boosting its exports to the U.S. at all.

• Other Trouble—But there's more to the problem than just the size of the import gap. Normally, Europe makes its living by selling finished goods abroad. So, if there is to be any big push in Europe's exports to the U.S., it will have to come in manufactured goods. And that spells the hottest kind of tariff trouble, because that's where the tariffs are highest.

• Devaluation—For the Europeans, some of the curse may come off the tariff picture if and when they devalue their currencies. Thus, if the pound sterling were cut from \$4.03 to \$3, it would have the same effect as reducing our duty on woolens, say, by 25%. But if that happens—as the U.S. Treasury hopes—the Administration is sure to feel more pressure from the protectionists.



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The husky Size 5 Allen-Bradley Switch is a heavyduty unit for the tough jobs. The Allen-Bradley solenoid design has led the field for over a decade. It has been imitated but never equaled for simplicity.

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#### BUSINESS BRIEFS

Goodrich and U.S. Rubber have gone along, as expected, with the price cuts in tires made by Goodyear, Firestone, and other tire sellers (BW-Jun.11'49,

Another cutback in steel production has been made by Carnegie-Illinois at its Duquesne works. It blew out the third of the plant's six blast furnaces this week. Of its 27 open-hearth furnaces, only six are now operating.

Steel output will slip to about 85% of capacity by July 1, says National Steel's board chairman Ernest T. Weir, will "decline further in the second half of the year." As for backlogs of customers' orders, they will have disappeared "altogether" by the middle of this month.

Two U.S. airlines at least are pleased by the Canadian air pact, even if Colonial isn't (BW-Jun.11'49,p38). They are: (1) Western, which will extend its Canadian service to Edmonton; (2) American which is asking CAB for a New York-Toronto run.

The metal trade's hope that copper prices would hold for a while at 17½¢ a lb. has gone glimmering. Two rapid 16 jabs did it.

The U.S. is finally in the world wheat agreement. The price-\$1.50 to \$1.80 during the first year of the four-year treaty-would have been better had the Senate ratified the pact last year (BW-Mar.12'49,p16).

Fire-insurance rates are being trimmed by more states. Last week Tennessee cut noncommercial rates by a stiff 20%; Florida cut rates in some classes by 10% to 15%. Now Pennsylvania is checking to see if its rates are too high.

Defying the trend in textile prices, American Woolen has boosted some of its cloths for women's coats 10e a vd. Buyers had looked for a dip in fall prices.

Seven tool and die shops in Connecticut have pooled their resources in one \$1million corporation—Connecticut Me-chanical Industries, Inc. As a single production unit, these small shops can now handle large orders on a direct contract

Construction employment during May dipped 42,000 from the year beforethe first time that's happened in nearly four years. Construction contractors had some 2-million on their payrolls this

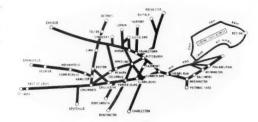




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## REGIONS



CLOWN AND HIS "BOSS" boosted Welcome Neighbør Week in Madison, S. D. Clown could relax; George Morrison, secretary, chamber of commerce, couldn't



DRESSED FOR THE PARTY: Egan Avenue (Main Street), Madison, S. D., sported "Welcome Neighbor" flags, whitewashed curbs to attract visitors—and buyers—to celebration

# Jamboree on Main Street

South Dakota town holds week-long open house to sell itself as a shopping center, keep customers from straying to the big city. Some 35,000 guests came, and business nearly doubled.

Madison, S. D. (pop. 6,000) had a lot of company last week—paying guests. Some 35,000 visitors dropped in on that friendly town to say hello. This was "Welcome Neighbor Week."

• Invitation to Buy-Business and professional men of Madison had put their heads, muscles, and money together to make the seven-day welcome a royal one. Their object: to remind their customers—mostly farmers—that they didn't have to go to the big cities for their shopping. They could find most of what they wanted right at home in the village stores.

Madison's problem wasn't a money scarcity. The oat, corn, wheat, and livestock business has flourished in South



# DC Silicone (Life-time) Lubrication Pays Dividends

The more progressive manufacturers of electrical equipment have found that DC Silicone (life-time) lubrication gives their customers long term, trouble-free service. That's true in motors ranging from industrial units to the "flee-power" synchronous motors used in the killowatz demand meters and time switches made for electric utility companies by Sangamo. These devices must give several years of continuous and absolutely accurate service whether they're installed in the North where temperatures drop to  $-40\,^{\circ}\mathrm{F}$ , or in the South where internal temperatures reach 180°F.

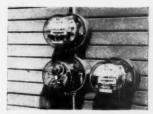


PHOTO COURTESY SANGAMO ELECTRIC COMPANY

DC 33 Silicone Grease retains its consistency to permit timing motors in demand meters and time switches to operate at constant speed in spite of varying climatic conditions.

Sangamo engineers specified DC 33 Silicone Grease for the bronze sleeve bearings of these small syndronous motors after extensive comparative testing. Their tests proved that DC 33 was superior to any other lubricant for this application because it is practically non-volatile, heat-stable, and because it has low torque at low temperatures. Final proof is the fact that thousands of these little motors have given faultless service ever since Sangamo started to use DC 33 Silicone Grease over 3 years ago.

In oven and toaster timers, parking meters, wind velocity indicators and in the permanently sealed bearings of industrial motors, Dow Corning Silicone Oils and Greases have made permanent lubrication a practical readily. You can obtain more information about Dow Corning Silicone Greases from our nearest branch office or by writing for data sheet No. D5G

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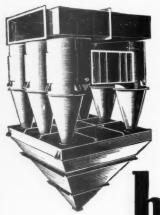




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PUBLISHER—George Hunter printed special edition of Madison Daily Leader, enjoyed 40% increase in advertising over two-month period

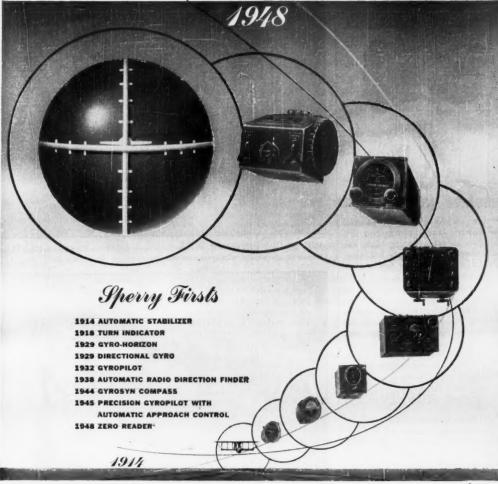


GRAIN MAN William Callan (left) checks a sack in his grain and feed store. A celebration backer, he's vice-president, chamber of commerce

Dakota. The community generally is well heeled. The problem was to keep some of the cash at home. Behind the welcoming smiles and merchandising hoopla, Madison was in dead carnest.

Good Show—To put over its show, community leaders gave it all they had. One local paper reported exuberantly:

"The New Orleans Mardi Gras, the fabulous Tournament of Roses, or Easter morning on Fifth Avenue will have nothing on Madison when the multicolored, beauty-bedecked floats pass down Egan Avenue at 6 p.m. Mon-



TRADEMARK PAT PENDING

# Peader - ANOTHER SPERRY "FIRST"

➤ Man's first airplane instrument for automatic flight was the Automatic Stabilizer introduced by Sperry in 1914. Down through the years, Sperry has developed—through pioneering research and engineering—many added "firsts" in aviation equipment.

Now, Sperry introduces the ZERO READER . . . the only manual system approaching the performance of

stabilized automatic flight control... another progressive step toward development of all-weather operations.

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IVE a heavy-duty 'Load-Lifter' G Electric Hoist the toughest lifting job within its capacity. Make the loads near-capacity and the full round of the clock for as many days a week as you work!

The 'Load Lifter' will take this most grueling punishment as part of the day's work an , be ready for more next morning. Rugged strength is not the sole reason. Sturdy construction and dependable performance are the real reasons, for the 'Load-Lifter' has many special features combined in no other hoist in the world.

There is a totally enclosed, ballbearing motor, so that oil, dust, and grit cannot enter. It has one-point lubrication which means oiling at one place only about every six months. Fool-proof upper stops and safety lower blocks eliminate damage to load, hoist, and worker.

With the two-gear reduction drive, interchangeable suspension, and other features, you have the strongest, most economical lifting unit the market offers. It demands minimum attention, assures you of freedom from breakdown and keeps maintenance costs at the lowest possible level. Install 'Load-Lifters'-and forget them.

'Load Lifter' Electric Hoists are built with lifting capacities of 500 to 40,000 lbs. in all combinations required for industrial needs. They are adaptable to almost every working condition within their capacities. Send for Catalog No. 215.



# Hoists

MANNING, MAXWELL & MOORE, INC. MUNKEGON, MICHIGAN Bulders of "Shaw-Box" Crones, "Budgat" and "Ioad Lifter' Hoists and other lifting sincosities. Notices of Arbertol Gauges, Mancock Valves, Conscidered Safety and Relief Valves and "American" industrial Instrument.



SPRUCED UP FOR SALES: C. T. Grimstvedt spent \$10,000 on his Coast-to-Coast stores. Grimstvedt, chamber of commerce president, sparkplugged the celebration



PLANNING COMMITTEE listens closely as George Morrison (extreme right) explains vital point in the program. Businessmen of the town cooperated 99% to make it a success

day, June 6, in the first parade of Welcome Neighbor Week.

There were special attractions like dances; style, beauty, and horse shows; also baby parades.

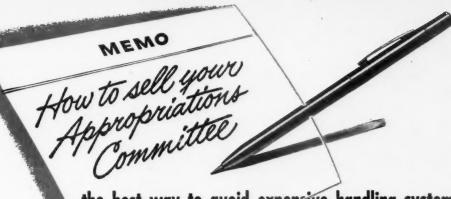
Stores rented animated window displays, held open house. There were a special cooking school, a textile painting exhibit, industrial movies, auto and implement shows, special appliance demonstrations.

Nearly 100 manufacturers and suppliers took advantage of a natural sales opportunity. They sent representatives to offer on-the-spot demonstrations.

• Success—The exuberance of the local press was well founded. C. T. Grimstvedt, owner of Coast to Coast Stores,

Inc., president of the town chamber of commerce, and a prime mover behind the celebration, said, "Even if we had canceled the celebration the day before it started, it would have been a huge success

· Cleanup-One big reason was the big cleanup and modernizing drive the town put on in anticipation of the party. Business firms spent on an average of \$150 each to dress up; Grimstvedt's own store spent \$10,000. Some store fronts were treated to their first coat of paint in 30 years. A bucket-and-brush brigade whitewashed the curbs on the main business streets. Newspapers listed columns of shops with an itemized account of what each had done. (Typi-



the best way to avoid expensive handling systems

Economists and industrial agineers predict that the last great unexplored area for lowered factory costs will be found in the field of material handling. We believe they are right. But economies from laborsaving handling systems are only part of the agreer.

11's equally important to reduce the need for handling—by using fewer machines and keeping them loaded. That's where Acme-Gridley bar and chucking automatics can help.

Unless your appropriations committee is fully familiar with the versatility of modern Aeme-Gridleys—and their ability to give you more good pieces in the pan, economically, around the clock—they may overlook this lucrative way of cutting costs. Below is printed one typical case study. Could you use a file of similar examples, to help prove your point? Ask us for them.

CUT THIS OUT FOR USE WHEN YOUR APPROPRIATIONS COMMITTEE WANTS PROOF

#### AN ACME-GRIDLEY CERTIFIED CASE STUDY

#### THIS IS WHAT HAPPENED:

PART TURNED-Brass Magnet Shaft

MACHINE-9/16" Acme-Gridley RA 6-Spindle Bar Automatic

OPERATIONS PERFORMED—Fifteen, to machine part complete, including a square hole—and counterbore of large end, plus pickoff

TIME-5 seconds

#### AND HERE'S ONE IMPORTANT REASON:

Typical of many design features that permit Acme-Gridley automatics to maintain accuracy under conditions of sustained heavy-duty operation is the stock reel disc, independently operated through a separate shaft and gear. With this arrangement, the load is not thrown on the spindle carrier while indexing;



while indexing; the tendency to spindle whipping is eliminated; there is no excessive wear on spindle bearings and carrier.



THE NATIONAL ACME COMPANY

170 EAST TO IN STREET - CLEVELAND B. OHIO

ACME-GRIDLEY BAR and CHUCKING AUTOMATICS built in 4, 6 and 8-spindle styles, maintain occuracy at the highest spindle speeds and fastest feeds modern

cutting tools can withstand.



# This amazing NEW invention will make you a <u>better</u> executive!

# —by stepping up your ability to get things done!

The new Dictaphone Time-Master changes all previous conceptions of dictating machine usage.

Completely revolutionary, the TIME-MASTER is finding its way into offices that never before used mechanical dictation! Here's why:

Never before has any method or instrument offered so quick, so easy, so inexpensive a means of getting your thinking on paper!

50 easy to use! The streamlined TIMEMASTER lets you concentrate on your thoughts. Just think out loud—TIMEMASTER does the rest—lets you cash in on those moments between phone calls, interviews, and conferences! You instantly record your thoughts without calling for secretary-and-notebook.

Records on plastic MEMOBELT! The exclusive plastic MEMOBELT is the most versatile of dictating media. It records clearly and uniformly . . it's easily mailable (in a standard business envel-

# DICTAPHONE Electronic Dictation

Only Dictaphone Corporation makes Dictaphone\* Machines (\*Reg. U. S. Par. Off.) ope) . . . and it's so inexpensive that it can be discarded or filed after one use.

Secretaries love TIME-MASTER! It helps them get their work done faster, with less effort. MEMOBELT clarity and the tiny new Magic Ear make transcription unbelievably easy, pleasant.

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Your Name	
Company	
Street Address	
City & Zone	State

cal entry: "Kelley's Grocery, new awnings.") Merchants added lines of goods they had never sold before—and sold them. Everybody cooperated, with the lonely exception of the pool-hall operator. He doubtless figured he would do all right anyway.

• Boom—The celebration paid off in other ways than the over-all beauty treatment. Before, during, and shortly after Welcome Neighbor Week, business nearly doubled. Wholesalers and manufacturers who supply Madison shops felt they were back in a buyers' market again.

• Friends First—There were some special sales during the week. But store owners gave their word that there would be no gouging or price boosting. As Grimstvedt explained, "We didn't use any merchandising tricks. We didn't try to sell our guests to death. We tried to make friends first. The selling will come later."

 Origin—Clew for Know Your Own Strength Week came out of Pathfinder Farm Journal, which told of a similar project to boost local business. Back in August, 1948, business was good in Madison, getting better. By January it was still good, but businessmen knew it couldn't last—without some help.

So community leaders took a frip to Webster City, Iowa, which had staged the same kind of stunt last year. They learned the ropes, thought up their own hospitable "welcome" twist, and went to work.

• Grace Note—The preparations were thorough. Two days before the event, businessmen sponsored a movic for clerks, waitresses, attendants, and other employees. The movie showed the audience how to treat the guests.



WINDOW SHOPPER finds something interesting in printing and stationery shop



Take No Chances-

# **Buy Boxes By Their Pedigree**



EXPERIENCED BUYERS know there is extra assurance in buying boxes with a pedigree.

That's why P. Ballantine & Sons rely on Union boxes to carry great quantities of their famous beer and ale from brewery to dealers' shelves.

Many other makers of national brand merchandise know the Union shield on a box means it is made by the leader in Kraft packaging, operating five of the world's largest paper machines in a completely integrated pulp-to-container plant. Linked with this great plant are tremendous forest resources and four modern box plants—and one management with one high standard of quality control supervises everything from timber to finished box.

That is why makers of many national brand products know that Union corrugated boxes give extra assurance of consistent quality, consistent service and fair price.



Dependable Packaging Since 1872

# UNION Corrugated Containers UNION BAG & Paper Corporation

Principal Offices: WOOLWORTH BLDG., NEW YORK 7, N. Y.

Corrugated Container Plants: SAVANNAH, GEORGIA • CHICAGO, ILLINOIS • TRENTON, NEW JERSEY



# "Wish I could skip the next hour, Ed"



MAN IN CAP: Something wrong, Mr. Willard?



MAN IN HAT: Nothing we can help. It's just that Γm on my way over to see Tom's family.



We're sure going to miss Tom around here. He was a great guy.



Certainly was, Ed. He'd worked here 26 years, you know. But somehow, working with him so long just makes it harder to talk with his wife.



Having Tom's insurance check with you ought to make the job some easier.



That \$3000 check is the only good thing about it. I'm glad we started our Employee Insurance Plan soon enough to help Tom's family.



If I know anything about Tom's family, \$3000 will sure come in handy. Maybe that boy of his will be able to finish college after all. Tom always worried about that. You know, Mr. Willard, the men who work here all think there's nothing like this insurance plan of ours.



I'm pretty proud of it, too. But if our Travelers man hadn't shown us how a small company like ours could get this Employee Plan of Life Insurance, Tom's widow wouldn't be getting this check. Till then, I thought only



a big outfit could afford to carry this kind of insurance. Our plan costs us only about \$415 a year. But it insures you and all the rest of our 12 people for \$3000 each.



I don't know much about the money end of the business, Mr. Willard, but having that insurance makes a lot of difference in the way a fellow feels about his job.

If you have five or more employees, find out about the Employee Life Insurance Plan that can be tailor-made to your needs by The Travelers.

Let your Travelers agent or broker show you how Travelers experience can help your employee insurance bring you the greatest return—in employee satisfaction and in employee good will.

ON ALL FORMS OF EMPLOYEE INSURANCE YOU WILL BE WELL SERVED BY

#### THE TRAVELERS

The Travelers Insurance Company, The Travelers Indemnity Company, The Travelers Fire Insurance Company, The Charter Oak Fire Insurance Company, Hartford 15, Connecticut. Serving the insurance public in the United States since 1864 and in Canada since 1865.

# MANAGEMENT



1 This attractive, well-landscaped plant is the \$3-million home of Cleveland Graphite Bronze, which has prospered with unorthodox management policies

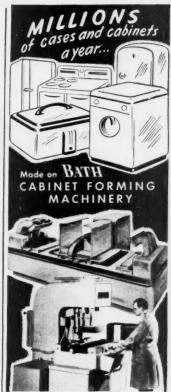
# Company With Unusual Ideas



2 Among the company's unusual policies: It gives a 25e bonus to employees every day they take a shower at the plant. It pays off in morale and health



3 The company sponsors a varied sports program, shows employees how to take part. It also promotes dramatics, fishing and hunting, picnics (TURN TO PAGE 40)



BATH machines have completely revolutionized cabinet forming by eliminating costly conventional manufacturing methods. A single cycle of operations forms outer shell in one piece. No wrinkling—no costly hand finishing—lower unit production costs for you. Available for modest or large production, fully or semi-automatic. Ideal for forming cabinets, shrouds, cases, boxes, bases and liners for:

REFRIGERATORS SPACE HEATERS
WASHING MACHINES UNIT HEATERS
VENDING MACHINES RADIOS
ELECTRIC CONTROLS TV SETS
KITCHEN CABINETS IRONERS
ELECTRIC ROASTERS STOVES, etc.

Send blueprints and advise production requirements—or write for catalog.

THE CYRLL BATH CO.

Design Engineers and Manufacturers of METAL FORMING EQUIPMENT

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\*ROUND-TOP Bidgs, adaptable for all farm use, or with glass or stone front, for small retail stores. A Star Building can be tailor-made to fit your problem . . . at LOW COSTI



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"It's Best By for ... When Built By STAR"

#### CLEVELAND GRAPHITE BRONZE (continued from page 39)



4 Company gives employees lessons in economics. Now it has broadened that program to include plant-tour groups of outsiders such as this in an economics lesson



5 The men behind these ideas are the four founders, who still run the company. They are, left to right: C. W. Johnson, J. L. Myers, B. F. Hopkins, and J. J. McIntyre

# Their Razzle-Dazzle Works

Cleveland Graphite Bronze hasn't missed a quarterly dividend since 1922. It thinks happy, informed employees do better work.

"The more our employees and the public know about us, the less we have to fear."

James L. Myers, president, and the other top executives of Cleveland Graphite Bronze Co. sincerely believe in that philosophy. As a result the company has spent some \$50,000 in about three years to tell its workers—and the

people of Cleveland-about the country's economy and the company's place in it.

One facet of that program is a twohour course in economics for employees. The first hour is devoted to general national economic problems; the second to economics as they affect the employee directly—with the business and

# longer service life and save space





Curtiss-Wright finds space at a premium and dependability a must in propellers for the B-36. Because compact Torrington Needle Bearings combine light weight with high capacity, fifteen are used in the pitch change mechanism of each propeller.

You, too, may secure longer service life with a more compact design by using Torrington Needle Bearings in your product.

Needle Bearings, with a full complement of small diameter rollers, have tremendous radial load capacity and low friction . . . yet occupy less space than any other type of anti-friction bearing. The design assures an ample reserve of lubricant to cushion wear and reduce maintenance attention.

Gain the sales and service appeal of dependable anti-friction performance, despite space limitations, by specifying Torrington Needle Bearings. Our engineers will be glad to lend a hand. Write us today.

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Coldwell-Philadelphia depends on Needle Bearings in wheels and clutches to last the life of its power mowers. Small-size Needle Bearings help achieve the added benefits of compactness and light weight.



American Brake Shoe Co. reduces wear at the wrist pin of Kellogg-American Air Compressors with Needle Bearings. These compact units prove ideal for the limited space requirements.



TORRINGTON NEEDLE BEARINGS

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S P I N N I N G P O W E R



SPLIT-SECOND

STARTING



PERSONNEL DIRECTOR M. A. Young's department at Cleveland Graphite Bronze has some odd jobs. Among them: getting employees theater and sports-events tickets

financial affairs of the company as they relate to the employee's everyday life used as a case study.

• Success—Last week, the company learned definitely that these courses had done what they set out to do. A survey taken by Opinion Research Corp. of Princeton, N. J., found that the courses had caused a great change in the employees' economic thinking.

The research company selected a random group of employees: it asked them several questions both before and after they had taken the course.

One of the questions: Who or what has done the most to improve living standards? After the course, 21% said strong labor unions: 13%, government help; 9%, better workers: and 70% gave the credit to better machines and tools (some gave more than one answer). Before the course, on the other hand, only 42% mentioned machines and tools.

Another question: Who stands to gain when new and better machinery is added? Before the course, only 43% realized that employer, workers, and customers all benefit: after the course, the percentage had risen to 62%.

A third question: Is the number of jobs reduced when a company adds new and better machines year after year? Before the course, 47% said yes; after the course, 72% said no.

The employees' course grew out of a similar project, started just after the war, for the company's management group. A firm of economists was hired to give a series of 13 lectures (on company time) to all employees down to and including foremen. The first nine were on basic economies: the last four gave specific data on how Cleveland

Graphite Bronze fits into the over-all economic pattern.

• For All of Cleveland-Reactions to the employee courses were so encouraging that Myers decided to broaden the program even further-to all the people of Cleveland. Under his direction, a program was worked out which combined a 45-minute tour of the plant, an explanation of how the company operates, and a dissertation on the economic facts

A group of 40 employees was chosen to conduct the tours; the men got special training for the work. The tours got under way last November; since then, about 1,000 people have taken them. The company sent out one let-ter-to 78 rotary, Kiwanis, women's clubs, and similar groups. Since then, the news has spread. Cleveland Graphite says it will continue the tours as long as there is a demand for them.

The tours start in the company theater with a slide film, which tells of the history and products of C.G.B. Then the group is subdivided into smaller units for the trip through the plant. Finally, the group reassembles for the talk on the American economic system and the company's part in it-and a question period.

• No Dodging-Because of what has gone before, the discussion at this point is usually fast and furious. The discussion leader-often Myers himself -doesn't dodge; he does his best to answer all questions fully and frankly.

And that's not always easy. In addition to points raised by the subjects under discussion, Myers gets such questions as (from a housewife): "Why wouldn't you hire my husband for an office job?" And (from a salesman who also turned out to be a stockholder): "Why won't the company buy from The answer to the housewife is not recorded: Myers told the salesman that, in company buying, the fact that a salesman is a stockholder isn't nearly so important as the quality of his wares. · Quiz-Stockholders who attend company meetings are also encouraged to ask questions. Some of these also turn out to be pretty unusual. For instance, one stockholder once asked Ben F. Hopkins, chairman of the board: "I'm loval to C.G.B., but I'm getting tired of losing a buck on your wife's horses every time they run. When are they going to win a race? And does the fact that you have just sold some of your stock have anything to do with those race horses?"

Hopkins' answer: "Those race horses are strictly the property of my wife. I haven't a thing to say about them-

• For Employees-Cleveland Graphite's interest in its workers goes far beyond its concern with their economic knowledge. The company management has always believed that a satisfied worker



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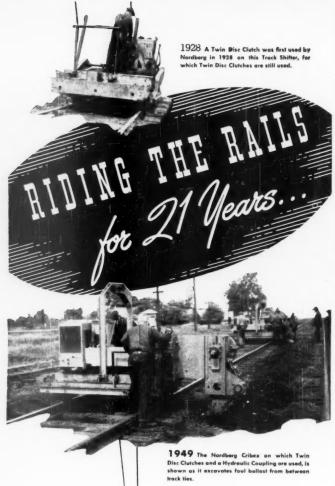
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• For more than 21 years Twin Disc has been "riding the rails" on track maintenance equipment built by the Nordberg manufacturing Company, Milwaukee, Wisconsin.

In 1928, Nordberg first started using Twin Disc Clutches to transmit engine power on their Nordberg Track Shifter. Nordberg's most recent Twin Disc equipped machine is the Cribex used to excavate foul ballast from between track ties.

Like most leading manufacturers of heavy-duty equipment, the Nordberg Manufacturing Company has used Twin Disc Clutches and Hydraulic Drives for various types of track maintenance machines on the basis of many years of customer satisfaction. Twin Disc Clutch Company, Racine, Wisconsin (Hydraulic Division, Rockford, Illinois).



JUDGE TWIN DISC BY THE COMPANIES IT KEEPS

is a better worker. When the present plant was built in 1941-1942, the company tried not to overlook anything that could help toward that goal.

Workers in the foundry and in other dirty, hot jobs got special consideration. "It galled the management," says Myers, " to see the workmen from the foundry and other hot jobs leave the plant dirty at the end of their day. It didn't help their morale one bit. It didn't give the workman's family or his neighbors a very high opinion of where the fellow worked. And then there was the health problem. We use lead in our products, and we were highly conscious of lead poisoning to workmen in other industries. We determined to eliminate any such possibility at our company."

• Shower Bonus—So complete shower facilities were provided in the foundry and other dirty-job departments. Special factory work clothing was provided for workinen in those departments. And that's not all: There's a special daily bonus of 25¢ for every man in such a job who takes a shower and changes his clothes at day's end.

"This bonus," says Myers, "is now routine. The \$30,000 it costs us annually is money well spent. That bonus pays off in relations between employees and management; it also pays off in good health for the employees."

• Service Dept.—There are many other evidences of Cleveland Graphite's interest in its employees. An Employee Service Dept. in the Personnel Dept. gets auto and driver's licenses, hunting and fishing licenses, and theater and sporting-event tickets for employees. There are extensive recreational programs

The interest extends even after death. When an employee or a member of his family dies, a representative of the Personnel Dept. immediately visits the family. His main purpose is to offer sound advice on burial plans, to make sure that the family isn't pressured into spending more than it can afford.

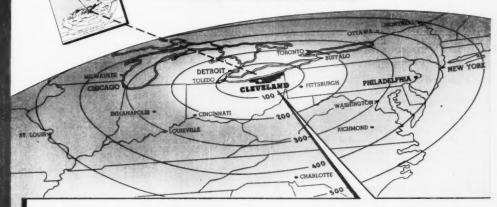
The company's interest in its workers had caused some other Cleveland employers to tag Hopkins and his associates pamperers of labor even long before the Wagner act. But even so, it hasn't kept the company completely free of labor trouble. The plant has been struck twice by the Mechanics Educational Society of America, which represents the workers. But the company made out all right in the settlements.

• Proud of His Plant—Many of the employees are also stockholders. For their benefit, the company held its annual meeting last April at the plant. Made the worker-stockholders feel more at home, the management decided. And it gave the company a chance to show off to other stockholders its plant and

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the Nation for Chemicals, too!

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- Plenty of manpower with the know-how.
- Many producers of parts, materials and supplies.
- Basic materials right at

- Ample financial services.
- Numerous business and industrial services.
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Hermetically sealed refrigerating circuit Pressure-type blowers 2 independently powered air circuits Soundproofed cabinet Thorough air filtering Universal air direction grilles Positive fresh air control Room oir exhaust

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3. Automatic Ice Makers self-contained fully automatic units... for quantity users of ice cubes - "look for the cube with a hole."

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its surroundings-something of which it is very proud.

This interest in having a well-kept plant, which is part of a well-kept community, is as old as the company itself. Each time it moved the management has worked hard to improve the new factory and the neighborhood in which it was located.

Once, for instance, C.G.B. rented a new plant on Cleveland's East 72nd Street. Across the street were several apartment houses, which had been allowed to deteriorate until they were little better than slums. Cleveland Graphite went to the owners with a proposition: It would furnish the paint to renovate the buildings if they would furnish the labor. Before long, the buildings were back in good shape, and many C.G.B. employees moved in.

The present plant was built in the old tradition of beautifying the neighborhood.

• Auto Supplier-Today, Cleveland Graphite Bronze Co. is one of the leading manufacturers of lined bearings and bushings. More than 70% of its products go to the auto industry. C.G.B. was founded 30 years ago to take over the assets (and liabilities) of the defunct Dann Products Co. Its first product, from which it got its name, was a thinwall bronze bushing, with indentations into which graphite was forced to make it self-lubricating. This was offered to the auto industry as a substitute for thick-walled bushings.

• The Men-The four founders have been the company's top executive management ever since. All are still active. Hopkins, now chairman, was the first president. Myers, now president, started as chief engineer. The other two are: J. J. McIntyre, then vice-president and general manager, now vicechairman; and Carl W. Johnson, works superintendent in 1919, senior vicepresident today.

The four gathered a group of 20 workers around them. They worked long hours, scavenged machinery from local junkvards-and succeeded in losing money consistently for three years. In 1922 they showed their first profit— \$152,926. The company has never omitted a quarterly dividend since.

• Broader Line—The company started to branch out into new types of bearings soon after it got started.

It has just expanded still further, by acquiring Harris Products Co. through an exchange of stock. As with all of Cleveland Graphite's earlier expansions, the new products are closely related: Harris makes a complete line of vibration-absorbing shackles and mountings for the automotive industry.

Harris sales last year were about \$2-million. Cleveland Graphite itself did a gross business of almost \$30-million; its net was more than \$3-million.



# A "Best Seller"... for your product



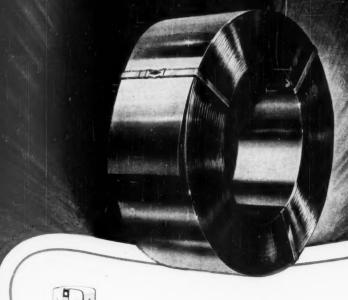
They all read the 'yellow pages.' They all get "where-to-buy" information from them. Most shoppers look in them for particular brands of merchandise or particular services. They're in the habit of using the 'yellow pages' of the telephone directory.

That is why Trade Mark Service\* in the 'yellow pages' of the telephone directory may be a "best seller" for you. This dealer identification plan can direct prospects straight to your dealers. It can help make your advertising more effective. It can save sales which might be lost through substitution.

We will gladly give you complete information about Trade Mark Service. Simply call your local telephone business office.

\*Trade Mark Service means your brand name or trade-mark displayed over a list of your authorized dealers' names and addresses in the 'yellow pages.'





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# **READERS REPORT:**

#### Compression, Not Injection

Sirs:

Your Business Outlook states "Plastics circles are buzzing over a reduction of about 50% in dollar volume of injection molding. Injection-molded plastics are a sort of index of consumer durablegoods output. They are used in a wide variety of such goods—for handles on electric irons, cabinets for small radios, and any number of others" [BW—Jun.4'49.p10].

I am sure plastics circles will be buzzing—but with angry overtones. Injection-molded plastics, in particular polystyrene such as Monsanto's Lustrex, have been breaking records in the first quarter of 1949 with no appreciable slowdown in sight. Furthermore, they are no barometer of consumer durable-

goods activity. . .

For polystyrene alone, which constitutes the bulk of thermoplastic molding compounds, the figures are impressive. In January, February, and March, 1948, the industry produced and shipped 31, 326,075 pounds, and in the comparable three months of 1949, 38,504,000 pounds—or a gain of 22.9%. April and May figures are not yet available but will undoubtedly show a healthy increase over the comparable months last year.

Recent estimates for various leading chain merchandisers show that 35% to 45% of all so-called "hardware" lines on their counters are today injection-molded polystyrene products. Toy departments run as high or higher.

It is possible your source was actually referring to "compression-molded" thermosetting plastics. This group of materials, and notably the phenolic plastics, are a fair durable-goods index, since their uses are mainly in component parts of radios, electrical appliances, wiring devices, etc. I should also include the electric-iron handles mentioned in the BUSINESS WEEK statement, since I do not know of any case where iron handles have been produced from anything but compression-molded thermosetting plastics. This business has been off 40% to 50% from the postwar highs, but at present is showing an upward trend. Outstanding developments such as the 35-pound Admiral television cabinet [BW-May14'49,p78] are indicative of the upsurge we look for. .

J. R. TURNBULL

GENERAL MANAGER OF SALES, PLASTICS DIVISION, MONSANTO CHEMICAL CO., SPRINGFIELD, MASS.

• We were clearly off base. We certainly did mean to say "compression-

molded" instead of "injection-molded." We know the difference well, and selected our product examples for the Outlook item to fit compression molding.

#### How Long a Brand Name?

Sirs:

In the article "Brand Name Bugaboos" [BW—May14'49,p67] William J. Archer, Jr., lists six yardsticks by which to evaluate a good brand name. He could have added a seventh yardstick: It must not have more than two syllables, or at least not more than two accented syllables.

Every one of the successful brand names mentioned by Mr. Archer con-

forms to this yardstick.

MALCOLM B. BOYCE HAVERHILL, MASS.

# Investment Trusts for Fiduciaries

As editor and publisher of a magazine keenly concerned with capital management, I applaud your well-balanced "Investment Trusts Grow Fast" [BW—Mar.26'49.p93]. As you have done, we have opened our columns to careful explanation of the investment-trust idea to promote its understanding by the prospective investor.

Comments in your column indicate that your readers are looking for authoritative information about the investment-company business. One aspect in particular which you were unable to cover, due no doubt to space limitations, is the growing use of such shares for trust investment, particularly where a bank or trust institution acting as fiduciary has not been able to establish its own "common trust fund" of the kind described in your article.

There are certain legal problems connected with use of investment-company shares. So far as we know, the most comprehensive treatment of these important questions against a background of a thorough study of the investment company business, has been given by Alec Stevenson, vice-president and trust officer of The American National Bank of Nashville.

Mr. Stevenson contributed to Trusts and Estates in 1947 a series of five articles on investment companies, which we reprinted under the title "Investment Company Shares." In 1946 Mr. Stevenson had published a comprehensive volume, "Shares in Mutual Investment Funds" (Vanderbilt University Press) in which, from the point of view of trust-investment philosophy and with

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It will pay you to look into the many advantages of Sly Dust Filters. Ask for Bulletin 98.

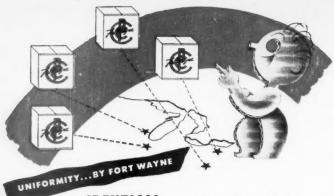


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thorough attention to the legal problems, he surveyed the entire investmenttrust and investment-company field. In his foreword to this volume, Mayo, Adams Shattuck of the Boston bar, leading trust authority, calls Mr. Stevenson's book "the first comprehensive study of the characteristics and accomplishments of American investment companies and investment trusts."

CHRISTIAN C. LUHNOW EDITOR AND PUBLISHER, TRUSTS AND ESTATES,

NEW YORK, N. Y.

#### Industrial Paterson

Sirs

We were very much impressed with the article entitled "New Jersey's Semicircle of Science" [BW—Feb.26'49, p30], and the map which accompanied it, but were also a little perturbed over the fact that practically every city in New Jersey was listed in the semicircle with the exception of Paterson.

To be true, we do not have the large industrial plants such as Johnson & Johnson and American Cyanamid, but we do have scores of small industries in the chemical field, textile field, manufacturers of dye stuffs, food products, rubber goods and plastics.

A little over a year ago we conducted a survey in Paterson. We discovered that both the number of industries as well as the industrial employment had doubled since 1939. We also found that Paterson had only 30% of its industry engaged in textile and related activities: 15% were engaged in the needle trades, manufacturing men's, women's, and children's clothing; 15% in the machine and the machine-tool lines and a vast 40% in a very widely diversified group which covered everything from slippers and play shoes, chemicals, plastics, rubber goods, and toys to pipe organs and stained-glass windows. Heretofore, most of the national encyclopedias have still called Paterson the greatest silk manufacturing city in the world.

EDWIN J. MACEWAN EXECUTIVE VICE-PRESIDENT,

CHAMBER OF COMMERCE, PATERSON, N. I.

#### Price of Coca-Cola

Sire

Your article entitled "Long Dividend Records Pay Off" [BW—Apr.2'49.p91] should bring to the attention of the public the low state of the market in relation to earnings. However, a correction is to be made in that Coca-Cola Co. stock is selling for 135 instead of 62 as you have stated.

ALFRED F. REVSON, JR.

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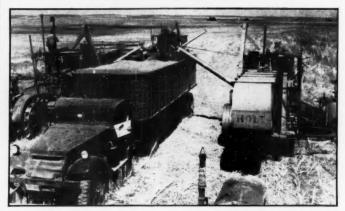


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Representatives in principal cities

# **AGRICULTURE**



HUGE TRUCKS made from Army surplus equipment may carry wheat when . . .



GRAZING AREAS in New Mexico are built up enough to grow crops in a big . . .

# Farm Project in New Mexico

Wheat king Thomas Campbell may succeed in raising grain in areas of state once considered useless except for grazing land. Success of project would greatly boost state's cattle-raising potential.

For centuries New Mexico's vast, arid plains have lain almost barren of manmade agriculture. With too much sun and too little rain, its good earth doesn't lend itself to cultivation the way the fertile states to the north and east of it do. It grows good range grass for basic feeding, but only grain will finish eattle for market. Only the boldest of farmers have defied the elements in an effort to raise grain on a large scale.

• New Try-This week one of the boldest of them all showed promise of sticceeding where others have failed. He is Thomas D. Campbell, 67, whom people long ago began calling "the world's biggest wheat farmer" because of his success on the semi-arid plains of Montana.

Last winter, up in the mountains above Albuquerque, Campbell carefully contour-plowed 500 of the nearly 400,000 acres of New Mexico land which he owns. In this area, always considered poor for grain, he planted winter wheat. Today it seems assured of being a successful crop: It now stands 16 in, high.

• Double Goal—Raising wheat alone is

• Double Goal—Raising wheat alone is not Campbell's goal. He believes in the

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No. 4 of a series featuring the cities and towns of the "Gulf South" served by United Gas.

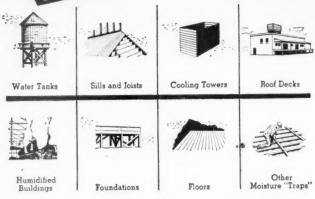
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EXPERIMENTER Thomas Campbell

combination of cattle- and sheep-raising, and feed-raising. That's what he did in Montana, and he is now starting all over again in New Mexico. He sold his Montana cattle and sheep two years ago, moved his organization and equipment to New Mexico, and is starting over there with new livestock.

Campbell started his new project by building up his land during the past 10 years through deferred or minimum grazing. (This process raised the value of some of his Montana land from \$3 to \$40 an acre.) Much of it is now bearing a good stand of grass. Cattle men say this grazing area contains one pasture of 100,000 acres that is the best in the state.

• Wheat From Grass—Campbell has taken a piece of the land he built up in this manner to start his wheat experiment. He figures there's a lot more good wheat land in the state being overlooked because it is remote from shipping points. Says Campbell: "We could haul it 100 or 200 miles and still make a profit." The reason: He has converted much Army surplus equipment into huge tractors and trucks.

Some New Mexicans say that Campbell's wheat project sounds a lot better than it might prove to be over the long haul. They point out that the weather man was in Campbell's corner last winter. After three dry years, an extra foot of snow in the Sandia Mountains to the west practically assured the success of his first planting.

• No Skepticism—Campbell doesn't share this skepticism. He knows full well that the biggest part of New Mexico acreage couldn't be cultivated without extensive irrigation. But he also believes that a great deal of the state's high country, which isn't being farmed, could be with its normal rainfall. (Some

# **New Du Pont Exhibit Room Shows**

# **How Cordura\* Rayon Delivers to Industry**

A story of savings in reduced manufacturing costs and improved product performance is told by this display in the new Du Pont Rayon exhibit room at the head-quarters of the Du Pont Company in Wilmington, Delaware. \* Shown here are some of the products to which Du Pont "Cordura" High Tenacity Rayon contributes high strength . . . at low cost. Inherently stronger than natural fibers commonly used, "Cordura" also offers the advantage of unvarying uniformity. \* Manufacturers are cordially invited to visit this exhibit room when in Wilmington.



Hose bursting strength can be increased up to 50% because of the high strength of "Cordura" reinforcement. Or hose can be made much lighter, yet with far greater resistance to flexing, strain and internal friction. Because less "Cordura" is needed to attain a given strength, it enables significant reductions in raw material costs.

A conveyor-belt carcass reinforced with "Cordura" has high strength plus remarkable troughability. "Cordura" makes possible lighter belts that are easier to set up and work with. And, in addition, it provides the necessary tensile strength for long-lift belts that eliminate costly transfer points...helps give longer life.

Widely used in V-belts, "Cordura" has virtually eliminated "stretch." That means more power from each belt . . . fewer take-ups . . . less maintenance. And V-belts last much longer when they're made of Du Pont "Cordura" High Tenacity Rayon. More and more V-belt manufacturers are turning to this super-strong material.

REG. U. S. PAT. OFF.

For more information about "Cordura"—or products made with it write Du Pont. We'll be glad to give you a detailed analysis of any application you have in mind, along with other helpful data. Rayon Division, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Del.

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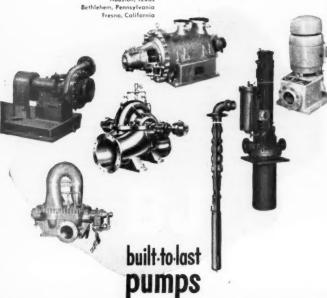
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Byron Jackson Co. manufactures centrifugal pumps, oil well tools, oil field specialties, and performs many technical oil field services.

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PLANT LOCATIONS: Los Angeles, California Mouston, Texas Bethlehem, Pennsylvania



20-million acres get 15 in, to 20 in, of rainfall a year, yet only 3.2-million acres are farmed.)

But how about the years of drought? That doesn't bother Campbell, either.

 Dry Farming—Campbell admits that in Montana droughts hit him badly until 1940. But then he began to try out his own dry-farming method of conserving soil moisture.

Here's how it works: Say in one year the rainfall amounts to 16 in. That isn't enough—in some cases—to farm. Besides, part of the land should lie fallow for a year anyway. So during that fallow year, the farmer catches another 16 in. but the trick is to hold it. If you let the weeds grow, they will exude the moisture. If you cut them and remove them, you take their moisture with them.

• Holding Moisture—Campbell prevents either of these results by using a shallow plow to cut the weeds underground, without disturbing the surface of the land. The weeds die and lie on top, holding in the moisture. So he has 30 or more inches in the soil when he plants the following year.

Campbell used this method in Montana so successfully that he says confidently: "We'll never have another crop failure due to drought." And although New Mexico is a drier state, he believes the same thing would work for his wheatfields there.

wheathelds there.

Science at Work—Campbell's faith in New Mexico comes from science and engineering, not from the divining rod. He became the world's largest wheat farmer as a result of putting science to work during World War I. In 1918, the U. S. government assigned him to grow wheat to beat the Germans. With a S2-million loan from J. P. Morgan, he set a world's record for big-scale, scientific farming on 95,000 acres of semi-arid land in southern Montana.

By 1929 he was helping the Russian government with its first five-year plan. In 1941 he showed the British how to double the effectiveness of their tractors—simply by putting headlights on them and operating them night and day. During World War II, he worked at boosting crop production in North Africa, Normandy, Burma, China. He had gone into the army as a lieutenant-colonel after Pearl Harbor, emerged as a permanent brigadier-general four and a half years later.

During his military stint. Campbell made other contributions to the war effort outside the field of agriculture. He suggested that bulldozers be mounted on tanks to help clear, the roads in Normandy and cover up Japanese pillboxes in the Pacific. And it was he who invented the devastating firebomb which was used so widely in raids on Japan.

• Lease and Buy—Campbell's interest in New Mexico goes back many years. His broad-scale farming operations around Hardin, Mont., were on 50,000 acres leased from the Crow Indians. But the government began limiting the size of individual leases on public lands. Campbell came to the conclusion that the day of large-scale land-leasing was over. The alternative to leasing, he figured, was to buy land. So he began looking around for cheap land. He found it in New

In partnership with John J. Raskob, the financier, he bought 367,000 acres at public auction-for less than \$1 an acre. (Raskob later withdrew.) The parcels he bought were old Spanish land grants, tired and run down after 300

years of cattle grazing.

· Grazing Only-But the bulk of Campbell's New Mexico grazing land-some 336,000 acres-will probably never produce wheat without irrigation: It gets only seven or eight inches of rainfall a year. It is on his parcel of 31,000 acres -the San Pedro grant-that Campbell is conducting his wheat-raising experiments. This area gets nearly three times as much moisture as the other-from 16 in. to 20 in. a year.

Campbell is sure that this is plenty of rain for his purposes. On his Crow Indian lands in Montana, 16 in. of rain was par. So even though New Mexico has more sunshine and drier air, he figures that his wheat should do all right

there, too.

· Wells, Too-Campbell isn't stopping there, however. Just to be on the safe side, he is sinking and planning to sink wells with which he would irrigate crops other than wheat. Says Campbell: "Any time you get enough water on land to grow wheat you can grow other crops to far better advantage. Irrigated land is too expensive for wheat, generally

speaking. Wherever he strikes water which

would supplement rainfall, he will plant alfalfa. He says that just 500 acres of alfalfa would double the cattle-feeding capacity of the entire 31,000 acres (now feeding about 500 cattle). In New Mexico, one of the major cattle-raising problems is that cattle which don't get supplemental feeding through the winter lose weight, have to be built up again. The alfalfa would provide the winter feed. Meanwhile, the wheat he raises would also go into the animals-to fatten them for market.

• Equal Acreage?-In New Mexico, Campbell sees even greater agricultural potentials than he managed to fulfill in Montana in 25 years. The government experts say that on the San Pedro grant alone 6,000 or 7,000 acres will grow crops. If wheat would grow on just 5,000 of these acres, and Campbell could find another dozen such spots in the state, he would have as many acres of wheat as he averaged on his Montana

holdings.

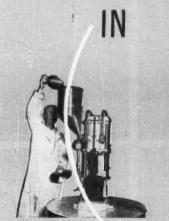
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Plaskon Alkyd's high arc-resistance makes it ideal for some electrical applications-and its dimensional stability makes it especially well suited for use in molded products which must maintain a constant fit or size. Parts made of Plaskon Alkyd have already proved their worth as units in electrical circuits, and in many closetolerance mechanical applications.

#### HOW WILL PLASKON ALKYD BENEFIT YOU?

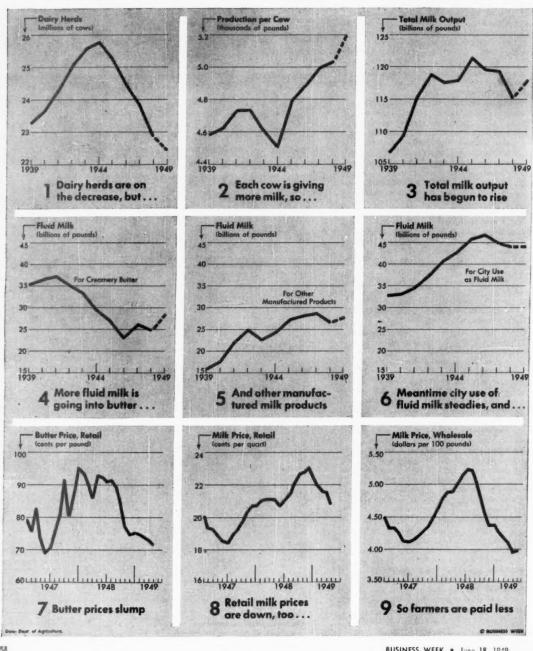
Because of Plaskon Alkyd's fastcuring and low-pressure molding properties, users of this unique new molding compound can manufacture plastic products more quickly and more economically. Molds are simpler and less bulky.

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# MARKETING

# Confused Milk Prices and Supply Strike a



# New Balance

Overproduction and heavy stocks last winter and spring upset the market; now things seem to be leveling out again.

Producers, processors, and distributors in America's multibillion-dollar dairy industry are beginning to breathe easier. They have passed through a hectic series of market readjustments in the past six to nine months. Now they can see some stability returning to the industry for the rest of the year.

Their outlook: fairly steady pricesat about current levels-at least until

the end of 1949.

• Seasonal—Usually there's a seasonal rise in price for fluid milk in the fall when output drops off. That can effect the price of a lot of other commodities manufactured from milk. This year it looks as though the rise—if any—will be small. This may mean less-than-maximum autumn profits for the fluid-milk producers, but it should help to stabilize the price structure of the products made from milk.

It's tough to draw a pinpoint diagram of just what is likely to happen to every segment of the dairy industry. The readjustments that have hit the dairy business since last fall have affected different parts of the industry in

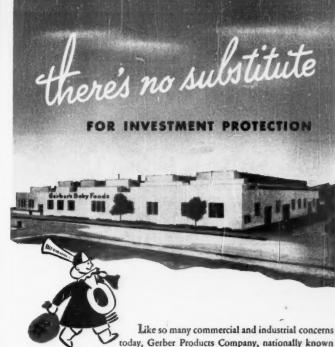
different ways.

• End Products—Besides, dairying is a complicated business at best. The entire industry has to rely on the farmer to supply the fluid milk, the basic commodity. There are several places that milk can go.

It can go, for example, to the fluidmilk handler. He's the man who pasteurizes it, bottles it, and puts it on your doorstep. Or it can go to a creamery to be made into butter. Or it can go to a processor to be made into cheese, or ice cream, or plastics, or some other manufactured product.

The picture is complicated further by the fact that dairy companies frequently overlap into all three fields: fluid milk, butter, and processed products. Add to this an intricate interrelation between the prices of all three types of products, and you have a pretty good idea of why dairy marketers don't sleep nights.

 Woes—The need for some kind of readjustment in the dairy business showed up last fall. Farm prices were going down; consumer demand for



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PROTECTED PROPERTIES

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Automatic FIRE-FOG provides positive protection for severe fire hazards Like so many commercial and industrial concerns today, Gerber Products Company, nationally known makers of baby foods, selected "Unionatic Eprinklev investment protection for their modern plant in Oakland, California. Their choice as you'll understand from the following, was a wise one; for in addition to safeguarding the lives of some 600 valued employees, "Unitomatic Eprinklev protection is remarkable from an investment point of view. The sprinkler installation in this case allowed for immediate insurance premium reductions of \$24,000.00 annually . . . savings which will amortize the cost of protection in about 4½ years, following which annual dividends will continue to accumulate.

This particular illustration is not unusual, for depending upon the risk, insurance savings of upward to 90% may be realized through the installation of "lutomatic Sprinklet" protection. It's good reason why thousands of business executives throughout the country specify multi-value fire protection with "lutomatic Sprinklets, an important investment today... perhaps welcomed protection tomorrow.

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"Automatic Sprinkler
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# LOOK FOR THE RED CENTER AND UNISON

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Gentlemen: Please send my free copy of "Why It Pays to		TITLE
Anchor Your Machines with UNISORB."()	COMPANY NAME	
Please send my free copy of		
"Felters Precision Cut Felt Parts Manual." ( )	CITY	STATE

Whatever your industry ... whatever the nature of the flooring in your plant...anchor your machines on UNISORB dairy products weakened; inventories of processed milk products began to build

Then, this spring, another factor started to pile up additional woes for the dairymen. This was the unexthe dairymen. This was the unex-pectedly early, heavy, and prolonged 'flush'' or peak season for milk production. This is just about ending

· More Milk-Total milk output this year rose almost 4% above the early-1948 level-despite a continuing drop in the number of milk cows on farms (charts, page 58). This rise resulted from three principal causes:

(1) Cheaper feed supplies from 1948 crops; this encouraged farmers to feed cows more heavily-and that produced more milk.

(2) A mild winter and an early, wet spring helped dairy pastures.

(3) Farmers had culled their herds down to the best milk animals.

· Big-City Dislocations-What highlighted the output gain, however, was this fact: Most of the rise was concentrated in big-city milksheds. As much as 15% to 20% more milk than a year ago began to flow from these producing areas. That caused market dislocations.

In the Boston milkshed, for example, milk handlers cut imports from the Midwest-because local producers were suddenly able to supply demand for cream as well as for fluid milk. That made the midwest surplus seem even greater. In the Chicago milkshed, 50% more milk began to funnel through local processing plants. In other cities-New Orleans, Philadelphia, Milwaukee-processing capacity became swamped; milk producers were placed

on marketing quotas.

• Differential—Another result: Since the fluid milk supply exceeded demand (which remained fairly steady), many farmers who ordinarily sold Grade A milk for drinking purposes had a surplus, which they had to sell for processing. And milk for manufacturing doesn't bring as much cash return as milk for drinking. -This situation was particularly evident in the north central states-a "big milk-producing area.

As the surplus developed, prices of dairy products began to skid. (At retail, the price of milk has held up better than that of most other dairy products. That's largely due to government-approved milk-marketing agreements, which regulate fluid-milk prices in 30odd major U.S. cities.)

· Supports-In general, dairy-product prices have come to rest on the government's two main price-support pro-grams-for butter and for dry skim milk. Indirectly, these supports have helped to stabilize prices and markets for most other processed products, too.

Here's how that works: Suppose but-



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■ If you had predicted the telephone one hundred and fifty years ago, you would have been tried for witchcraft or called a crackpot.

Of the 308 "great inventions" in the World Almanac, 90% were created since this Bank was founded in 1799. We have been privileged to help many of yesterday's miracles become today's commonplaces.

We wouldn't dare guess what your telephone will look like, or what new marvels it will perform 150 years from today. This much is certain:

Financial imagination goes hand in hand with creative genius in raising America's standard of living.

That's why we are looking, not back at what we have done in our past 150 years, but to the rewards of *imaginative* banking in our *next* century and a half.



Bank of the Manhattan Company

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION



Superbly designed and smartly styled to meet the growing requirements of today's modern office-the new Art Metal Aluminum Posture Chairs will increase the efficiency and morale of office personnel - will give them greater comfort through Correct Seating while they work. They're sturdy and smartly styled, too. Made of anodized aluminum that will not stain or mar - padded with Foam Latex - and covered with ventilated plastic fabric in a choice of three colors-Art Metal chairs are built to give long service and retain their smart appearance.

Yes ... the same high standard of quality that has made Art Metal Desks, Files, Safes and other metal busines equipment famous for over 60 years, is now Art Metal

available in a complete line of Art Metal Aluminum Office Chairs.

Clerical Posture Chair No. 7-A has the Art Metal "Tilt-ction" seat and "Live-Action" Action" seat and "Live-Action" back which permits true relaxation by maintaining the same sody angle whether the user is in working or relaxed position

U.S.A



WRITE TODAY - For information and literature on Art Metal Aluminum Posture Chairs and other chair models now available, write to Art Metal Construction Co. Jomestown N. Y

ter prices drop to the support level. Then processors may convert their milk supplies into cheese instead-provided, of course, that cheese prices are still relatively higher than butter prices. Once everyone does that, the supply of cheese increases and the price begins to drop. But pretty soon it sinks to the point at which it is again more profitable to turn the milk into pricesupported butter. In this way, the price supports on butter indirectly keep cheese prices up, too.

· Lack of Confidence-The dairy industry is sure of those supports at least through 1949. (In fact, the support price of butter is scheduled to go up 3¢ a lb. this fall.) Nevertheless, a good many creameries don't put too much trust in the price-support operation. In recent months, they have been selling large quantities of butter to the government-despite the assured price jump which is to come in September. This has been especially true in the Midwest.

One basic fear of the dairymen: Price supports could end with 1949, due to the uncertain provisions for dairy products under the Aiken law, which will take effect in 1950 unless Congress takes some new action on price supports.

· Oleo-Lower butter prices (they're down 25% from their peak) and 15% larger supplies have a bright side for butter makers as well as a dark one. They are helping butter win back some of the ground it lost to oleomargarine during the war. But Congress may legalize interstate sales of tax-free oleo at this session; that would put a further crimp in butter markets.

• Processed Products-As far as manufactured dairy products are concerned, cheese is probably in the best position. Output is up nearly a fourth from a year ago. Prices, however, are off about 20% at wholesale; and retail prices are down more than 10%

Evaporated-milk production has dropped nearly 20%. Packers have been giving price concessions to reduce stocks, which piled up to extraordinary size last

Among other processed products, con-

sumption of ice cream has been running a full one-fifth below the 1946 peak consumption; it's not expected to rise much despite price cuts this spring. Output of dry skim milk, on the other hand, is up almost 50%. This is due mainly to the government's support-buying program for school lunches and for export. • Better Spot-Fluid-milk handlers-the people who fill your order for two quarts of Grade A-have fared better than their processing brothers in most sections of the country. The increase in total milk output-plus the growth in numbers of Grade A producers-has helped them in two ways:



for Credit Department of Aladdin Industries, Incorporated

This customer's installation of a POSTINDEX Visible Index System is saving its Credit Department sixty per cent in operating costs. Besides, POSTINDEX has cut eighty per cent of the time needed for credit approval on orders-and reduced handling personnel from eight to two.

This is typical of the results that POSTINDEX users are reporting in all sizes and types of businesses - and in all of the departments

POSTINDEX Visible Record Systems and Controls are highly adaptable to the solution of any problem, whether it concerns Production, Sales, Purchasing, Inventories or Personnel. POSTINDEX is designed to effect savings in handling costs - speed the processing of records - and provide a perpetual, up-to-theminute picture of important facts.

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# SIBLE FILES



(1) It has made it easier for them to get supplies from nearby sources. In other years, when milk has run short in the fall, they have had to go far afield to locate suppliers.

(2) The fact that there are more Grade A producers in the major U.S. milksheds means that the big milk handlers are finding it easier to invade markets in smaller cities and towns near

the main urban markets.

• Various Troubles—Life for the milk handler has been pretty tough in some areas, however. In the metropolitan New York market, for example, consumption is following a steady downtrend. In the textile towns of New England, consumption has slumped along with mill employment. And there have been considerable price drops—both at retail and wholesale—in several midwest centers.

In general, however, consumption of fluid milk is holding just about steady with last year—in spite of the fact that, compared to the manufactured-milk products, fluid-milk prices are relatively high. The current level of consumption is off from wartime peaks, but it's still a good one-third above prewar.

• Inventory Worry—Fluid-milk handlers have one additional advantage: They don't have to face the inventory problems that crowd in on the processors. The processors shudder when they think of the inventory losses they took last fall. In 1946 and 1947, the processors misjudged their market, and built their stocks too low for autumn. Then, last year, they overcorrected, and built inventories too high. So prices slid.

This year, inventories shouldn't pose such a problem for the processors. A fairly stable price structure should limit

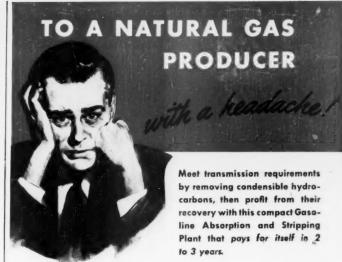
that headache.

• Farmers Lose–From the point of view of the farmer—who is the number one cog in the whole machine—the market and price readjustment has been costly. Last year he was in clover: Cash receipts from milk reached a new peak, 10% above 1947, despite the low output. This year production has risen, but milk is bringing 10% to 15% less cash income. The farmer got the old one-two from (1) the general dip in milk prices, and (2) the fact that he has had to sell a lot of his surplus for the lower-paying processing uses.

The drop in feed prices hasn't helped the farmer much—mainly because farmers are using lots more feed. This has meant that dairying costs haven't followed the downward trail as fast as

cash income.

Net farm income from milk, therefore, will be lower than it was in either 1947 or 1948. The drop will be quite severe in the north central states; but it will probably be slight on the eastern and western seaboards, where farmers' prices have held up best.



This continuously operating Gasoline Absorption and Stripping Plant with automatic control requires only daily operational check-up. It may be easily dismantled and readily transported to another site for reassembly at low cost.

In addition to removal of condensible hydrocarbons and their recovery as a raw gasoline, the flexible design of the plant by the installation of fractionating equipment, permits the production of stabilized gasoline and liquefied petroleum gases. This enables you to meet varying market demands. Ask for Bulletin 2225.

> The above is illustrative of the modern creative engineering approach of Blaw-Knox. In addition to complete plants Blaw-Knox supplies process equipment and machinery. An engineer-to-engineer discussion is invited.



# STACKBIN SYSTEM CUTS STORAGE - HANDLING - ASSEMBLY COSTS



IN STORAGE—Stackbins-in-Stackracks provide accessible hopper-front storage anywhere in the plant. Individual rack and bin unit can be combined as required, set up, rearranged or relocated without tools. All-welded, all-steel construction—in 5 sizes, from 5½° x 4° x 12° to 15° x 11° x 24°.

IN HANDLING — Individual Stackbins are easily transferred from storage to points of processing, stack compactly on floor or bench with parts always visible, easy to reach.



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REDUCE YOUR COSTS — Leading American industries use the Stackbin System. A one-department test order can convince you of Stackbin's time and labor-saving efficiency. Send for catalog and consult us on your materials handling problems.

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CLEVER DISPLAY is a strategy that figured in Block & Kuhl department stores' . . .

# Growth on Homespun Lines

Block & Kuhl's time-honored policies toward customers and employees are vital in building a midwest chain. So are central buying and other modern techniques.

When somebody comes to you and wants to lend you money, it's a sign that your business is in pretty good shape. When you turn the offer down, your economic health is beyond question

Orderly Expansion—That's the situation Block & Kuhl Co, is in. At least one big insurance company wants to lend the Peoria (Ill.) department store some money. But B. & K. doesn't want any now—except from its own sales.

Over the last decade, the store has engineered an orderly expansion by branching out into small Illinois and Iowa towns. Sales today are running at a record high.

• Homespun Plus—B. & K.'s formula for success is an interesting mixture: a homespun merchandising policy, plus modern selling and display techniques, plus a strong staff. This produced sales of \$28.2-million last year.

B. & K. has two basic aims in its merchandising policy: to operate a strong central store (in Peoria), which serves as a "laboratory," and to surround it with a network of smaller stores. B. & K. has set an annual sales target of from \$2-million to \$5-million each for these smaller stores.

, To pay for its expansion out of earnings, Block & Kuhl has put aside an annual appropriation ranging from \$750,000 to \$1-million.

• Strong Links—This long-term planning has forged some strong links in the Block & Kuhl chain. Between 1941

and 1948 the company built or bought eight branch stores in Illinois (Elgin, Kewanee, Rock Island, Galesburg, Winnetka, Ottawa, Freeport, and Danville) and two in Iowa (Davenport and Bulington). That brought the number of B. & K. stores to 18. Early this year the company added another by buying the Gebhart-Gushard Co. in Decatur, Ill., from Alden's, Inc.

But that didn't end B. & K.'s expansion plan. Last month the company opened a new- and used-appliance store in Peoria to handle trade-in appliances. And contractors are at work building a \$420,000, three-story, ramp-type parking annex for the Decatur store.

• Peoria Study—B. & K. hopes expansion will help the company keep on beating last year's sales figures. That's a big order. With U.S. department-store dollar volume running 4% behind 1948 for the year to date, many stores are willing to settle for a sales figure equal or almost equal to last year's. Block & Kuhl, however, expects to better its 1948 volume.

Just to make sure that it is on the right track, B. & K. has ordered a study of its central Peoria operation. It wants to see if it can streamline its merchandise handling and processing still more. At the same time, the company has hired an auditing firm to study a refinement program for departmental unit control and basic stock planning.

• Central Distribution—Block & Kuhl's marketing pattern focuses on its central



VER AND OVER AND OVER AGAIN-that's the way Mills Metal Partitions are used. They're made to keep pace with the constantly changing space requirements of modern business.

They're as permanent and solid and beautiful as any walls you'd ever want around you but they can be moved-quickly, easily and at very low cost-to fit any new arrangement of space that progress dictates. The entire job can often be done overnight without interrupting business routine.

Dignified and refined in architectural design, they're available in a wide variety of attractive colors in baked-on finishes that keep their fresh new look with a minimum of maintenance. Exclusive features like all-welded panel construction, special treatment that eliminates harsh, light reflection, and scientific soundproofing and insulation make Mills Movable Metal Partitions the demonstrably superior system for flexible division of interior space.

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### SPECIFY "MILLS" FOR:

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#### A CASE IN POINT

Mills Partitions, because of allwelded panel construction, need only a minimum of lines at panel joints to assure maximum mobility, precision erection.

For all the facts see Sweet's Architectural File or write for Mills Metal Partitions Catalog 49-0.





# PLUS these 10 other Big Features

I Simultaneous opening of CO2 and powder valves. No trapping of gas pressure in powder chamber before the discharge starts.

2 Quicker transfer of pressure to powder chamber. Siphon tube carries CO2 to outlet in powder chamber, where it expands to a gas.

3 CO2 cartridge easily replaced. Just . lossen name band holding cartridge -then unscrew cartridge. Same size cartridge for both 20- and 30-pound extinguishers.

**4** CO<sub>2</sub> fluffs up powder—prevents packing. Small port at bottom of CO<sub>2</sub> outlet tube allows gas to stir up powder.

5 Powder discharges from top through

siphon. No danger of packing at hose connection.

all Kidde\* carbon dioxide (CO2) extinguishers.

6 Powder filler cab needs no tools. Unscrews easily for refilling of extinguishers in the field. Filler cap is safety-vented.

7 Lightweight cylinder for ease of carrying. Pound for pound, the Kidde Dry Chemical Extinguisher packs more fire-fighting punch!

8 Better powder dispersion pattern. Diffusion baffle in horn gives greater coverage, more effective application. No shut-off valve in horn to trap powder under pressure in hose. No rodding out of hose after use.

**9** Extinguisher tested for operation at -40° F.

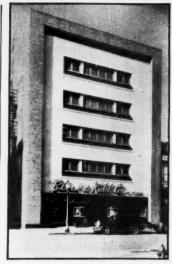
10 Improved powder and packaging. Powder specially processed to make it free-flowing; packed in weatherproof containers. 30-pound carton contains three 10pound cans-for easy refilling of either 20- or 30-pound extinguishers. 50-pound containers also available.

Write for full details



trade-marks of Walter Kidde & Company, Inc.

Walter Kidde & Company, Inc., 625 Main Street, Belleville 9, N. J.



NEW STORE in Ottawa, Ill., is one of the 19 outlets in the Block & Kuhl chain

distribution center in Peoria. Organized in 1943, "C. D." is a seven-story warehouse with about 120,000 sq. ft. It's managed by C. G. Lehr, vice-president in charge of store operations. C. D. is responsible for receiving, marking, and shipping goods for all B. & K. stores. It maintains perpetual inventory records so that store merchandisers can keep posted on inventories, sales, and control figures.

The warehouse has both a spur railroad and a truck terminal. Incoming merchandise arrives by train; then workers process it and reship it by truck to

B. & K. stores.

• B. & K.'s People—A staff of 60 buyers and merchandisers make their head-quarters in C. D. They work on what B. & K. calls "pooled purchasing"—buv-ing by a single group of buyers for all the stores in the chain.

But if the company plugs hard for marketing efficiency, it works just as hard to get and keep the right people on its staff. This concern about personnel goes back a long way. The late Fred. L. Block, who helped make the store what it is today, once said:

"If I had to choose between the complete loss by fire of the store with its stock of merchandise, or my organization, I would choose the first. The building and contents might be replaced within six months; a new organization such as we now have might take 15 to 20 years to restore."

• Loyal Veterans-B. & K. rewards its staff well for its allegiance. Managers, for example, have a three-way share in the company's success: (1) salary; (2) bonus, and (3) a stock interest.

Today you will find that most of the



# How this Cooper-Bessemer engine saves \$1,148 a month at Hominy, Oklahoma

ACROSS the country hundreds of small and mediumsized cities (and private industries, too) are in line for big savings on the cost of power. These are the towns that have their own power plants, powered by veteran steam engines or even by more modern oil-burning diesels.

In most of these places natural gas is available . . . not always in reliable volume, but that doesn't matter. By switching to Cooper-Bessemer gas-diesel engines, gas can be used to full advantage, can be burned in practically any combination with oil as conditions dictate. Not only is the gas much less expensive than other fuels, but these revolutionary Cooper-Bessemer gas-diesels give the highest engine efficiencies known today! That's how they save so much at Hominy . . . and in scores of other towns and plants already converted to Cooper-Bessemer gas-diesel operation.

Cooper-Bessemer engineers are constantly working out

new ideas to cut the cost of engine power. Their developments are applied to diesels for marine and locomotive service, and to gas, diesel and gas-diesel engines for all kinds of stationary service. If you have a stake in stationary power, be sure to find out about the new things being done by one of America's oldest engine builders.





# ANOTH ER EXAMPLE

OF GARDNER
PACKAGING
INGENUITY



The Two-Bottle "DISPLAY HOUSE" for Bellows & Company

# IT GOT UP-FRONT DISPLAY IN PACKAGE GOODS STORES; STIMULATED TWO-BOTTLE SALES

More two-bottle sales! That's what Bellows and Company had in mind when they asked Gardner to design a two-bottle display carton for such related items as gin and vermouth. You've probably seen the result on your dealer's shelves and counters: a miniature replica of the quaint old Bellows building in New York City, complete with gabled roof. And you're probably not surprised that this unique "display house," a typical example of Gardner packaging ingenuity, won preferred display space in windows and on counters, gave two-bottle sales a significant boost.

#### Can we help add sales-appeal to your product?

Do you have an old package that needs a face-lifting for today's self-selling

trend? Do you have a product that has never been packaged, or an idea that is "hard to package"? Let Gardner tackle your problem. No obligation, of course. Write, today.



Roof folds flat for wrapping, forming a neat, square pact age. No bottle necks show when it's carried home.

Gable-roofed cartons make attractive displays. Punched windows swing in to act as dividers for the two bottles, whose labels are visible in window openings.



# THE GARDNER BOARD AND CARTON CO.

Formerly The Gardner-Richardson Co.

Manufacturers of Folding Cartons and Boxboard, Middletown, Ohio

Sales Representatives in Boston, Chicago, Cleveland, Detroit, New York, Philadelphia, Pittsburgh, St. Louis

company's top-brass started their carcers with B. & K. as clerks, stock boys, and part-time workers.

Franklin H. Barthel, vice-president and merchandise general manager, for instance, took a temporary job as salesman in 1919 to earn \$100 to pay his fare to Annapolis. He's been with B. & K. ever since. President H. C. Blanchard joined the company in 1912 as a salesman in men's furnishings at \$10 a week. He gradually worked up to general manager, vice-president, then to chairman of the board. The same pattern has been repeated again and again ever since the store began.

ever since the store began.

The Hard Way—The origins of the present Block & Kuhl enterprise go back almost 90 years, to the opening of a Pekin (Ill.) retail store called Schipper & Block. By 1879 the firm decided to expand with another store in Peoria. The men picked for the assignment of opening and managing the new unit were two clerks in the parent store: Theodore Kuhl and Fred Block, a younger brother of partner Henry C. Block.

The young branch managers learned about merchandising the hard way. Their bosses pulled a fast one on them, stocked the Peoria store with \$3,000 worth of stuff the parent store couldn't move from its shelves—percales, prints, and ginghams in ugly patterns and colors.

• Buckling Down—But Block and Kuhl didn't let their supply of cat-and-dog merchandise lick them. Instead, during their first year, they moved the whole lot—plus some \$33,000 worth of other goods. But making the branch take firm hold took two years of hard work and long hours: 14 hours on weekdays, 17 on Saturdays.

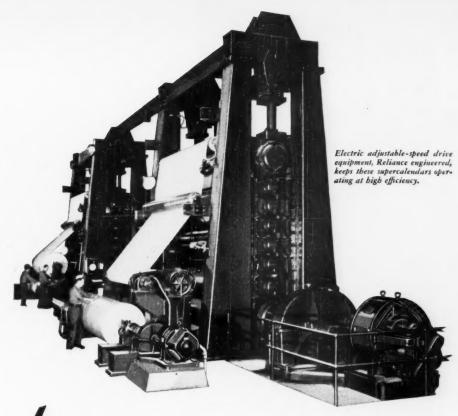
It wasn't until 1914, however, that Schipper & Block became Block & Kuhl. The intervening years were highlighted by a series of relocations in Peoria. With each move, young Block and Kuhl acquired larger quarters—and more customers.

• "Blockisms"—Fred Block's homely merchandising slant played a big part in this growth. Here's one of the "Blockisms" that B. & K. still practices:

"Don't underestimate the woman customer who enters the store with a basket. Her trade usually means cash in the till. Such trade is more loyal, more easily satisfied than the so-called carriage trade."

Fred Block's methods paid off. By 1916 he and partner Kuhl had their names up over a store covering three adjacent buildings in Peoria.

On the Way—Next move didn't come until 10 years, later, when Block & Kuhl opened a store in Decatur. A year later they opened in Rockford. After that, the "Inland Empire of the Block & Kuhl Co." was on its way.



RELIANCE ENGINEERING POINTS THE WAY to Top Speed Production!



Reliance takes special pride in a record of service to industry which covers a period of over 40 years. In the paper industry, for example, electric drives engineered by Reliance to meet any processing or converting requirement are delivering high production at low cost in mills of all types and sizes today. These results testify to the wealth of specialized experience and practical production "know how" which Reliance engineers are ready to place at your disposal. Just call or write the nearest Reliance office.

Sales Representatives in Principal Cities

ELECTRIC AND ENGINEERING CO.

"Motor-Drive is More Than Power" . 1069 Ivanhoe Road, Cleveland 10, Ohio



# Size Means Sales

Big stores sell more per sq. ft. than small stores. Their sales checks run larger. Reason: more items to buy.

If you increase the size of your store, how much do you increase sales? That's a question that many a merchant would like to have answered. Until recently, figures on how store size affects sales have been pretty scarce.

• Study—Last week, This Week Magazine released a study that shed some light on the subject. Store-size figures for the study were furnished by Colonial Stores, Inc., a regional grocery chain which does business in six southern states.

Colonial operates 142 large stores, 106 of medium size, 121 small stores. The large stores stock most of the Colonial warehouses' 1,481 branded items. Colonial's small stores stock about half the number of items handled by the warehouses; and the inventory



## Road Show for Fashions

The New Haven R.R.'s Show Train—the one that brings suburban theatergoers from Connecticut to Broadway (BW—Feb.26'49, p74)—added a new feature last week. Franklin Simon & Co., Inc., New York specialty store, decided that Show Train riders might make good F.S. customers. So the store put on its own bit of entertainment—a fashion show—on the last theater trip before the Show Train is sidetracked for the summer. Women passengers watched approxingly as ten models glided lithely and blithely from car to car in a succession of colorful summer costumes. Male passengers declared the trip passed far too quickly.

NATION-WIDE

RAIL-AIR SERVICE



Write your own Ticket to New Products and Profits...
with BRASS

HIGH STYLE AT LOW COST!

This combination opens the door to many a merchandising miracle.

Look around you at the smartest of the modern writing tools, lipstick cases, compacts, costume jewelry, home decorations. They all "look like a million dollars." But a lot of them sell for cents! And, for the most part, the common design-denominator is Brass... with its rich brilliance, its remarkable range of color, its unmatchable cost-cutting workability.

Many of these prodigious profit-earners are made of Bristol Brass sheet and rod. For mass-producers know they can bank on Bristol for Brass that never varies from original physical and dimensional specifications, or from scheduled delivery dates. They know, also, that any co-operation they want is theirs for the asking from Bristol's Sales Engineering Department. And these services and facilities are open to you, too, to assist in any phase of your new-product development. Just let us know what's on your mind. Write.

The BRISTOL BRASS

CORPORATION

Makers of Brass since 1850, Bristol, Connecticut

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NELSON STUD WELDING

One manufacturer's fastening problem involved attaching a transformer to a ¼ h.p. motor housing: another's called for the fastening of hand hole covers and insulated side panels to boilers. Both switched from old, time-consuming methods of fastening to Nelson Stud Welding with the same result—a whopping 90% reduction in fastening time.

Nelson Stud Welding is a money-saving means of end-welding fastener studs to steel surfaces. Widely employed in the metal working and construction industries, it eliminates drilling and tapping, hand welding, and other fastening methods.

Stud welding is fast—studs are automatically welded in a split-second, from one side of the work. It's better—uniform welds provide great strength, make possible more efficient design and improved product appearance. It's easy—the lightweight portable Nelson gun welds in any position, simply and easily. The equipment is inexpensive. It may be purchased or rented.

NATIONWIDE SERVICE—A Nelson Field Engineer will survey your present fastening methods and make recommendations, without obligation. Write today for illustrated catalog des-



for the medium-size stores falls somewhere in between.

• Findings—Colonial found that the large stores (which have three to four times more floor area than the small stores) attracted 3.16 times as many customers as the small stores. But, in addition, the average sales check in a large store ran 2.58 times that of the small store. This means that Colonial's large stores, with three to four times the floor space of the small ones, add up a total sales volume about eight times greater than the small ones.

The company's medium-size stores (with twice the floor space of the small store) get 2.12 more customers; and the sales check is 1.68 times larger.

Conclusions—This Week's conclusion: The wider range of merchandise gives the large store a sales edge that is proportionately bigger than its margin of floor space.

Some other This Week conclusions: Part of 1948's dollar-volume gain over 1947 (food-store sales hit a new high of 531-billion last year) was due to price increases; but these factors also counted:

Population increases:

• "Trading up" to better and higherpriced foods, and

• The increasing range of products now being sold in grocery stores.

## Florida Fair Trade Comes to Life Again

Fair trade has had a first aid treatment. Two months ago, the Florida Supreme Court gave it a bad jolt; the court killed the state's resale-price-maintenance act outright (BW-Apr.16'49, p28). Now Florida's Gov. Fuller Warren has put his signature on a new bill which, in effect, puts the old law back on the books.

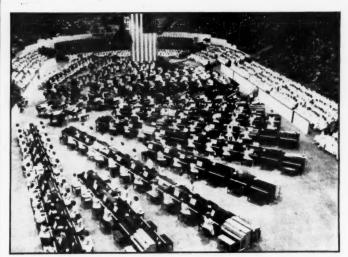
The new bill has a couple of twists. They're designed to get around the uncomplimentary language the Supreme Court used in last April's killing.

Twist Number One—The first section, titled "Findings of Fact," states—in seven paragraphs—that fair trade best serves the "public interests and general welfare of the state of Florida."
 Twist Number Two—Section 10 empowers the attorney general to bring actions to restrain performance of any fair-trade contracts that prevent comfair-trade contracts that prevent compared to the section of the section

transportation, sale, or purchase of commodities of the same general class."

That section aims specifically at a statement in the majority opinion which axed the old law. In it, Chief Justice

petition in the "manufacture, making,



#### Ivory Keys Unlock Two Markets

Get 320 pianos going at once and the din may give a lot of new people the urge to play. The repercussions may reach clear to the piano sales department. Some such idea was behind the display put on last week by the Michigan Piano Teachers' Assn. at the annual state music festival in Detroit's Olympia Stadium. Dr. Otto Miessner, noted piano educator, conducted 1,500 student pianists. The demonstration was part of a two-way promotion effort of National Piano Manufacturers Assn. of America and the Music Educators National Conference. Piano manufacturers want to sell more pianos. Piano teachers want to teach more students. Together, the associations are promoting classroom piano instruction in public and private schools. A lot of educational associations throughout the country are promoting the tieup.

Now at low cost you can get durable Colored Concrete Floors and Colored Sidewalks

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For colored concrete floors and colored sidewalks use Colorundum. For hotels, stores, hospitals, service stations and factories you get bright, colorful floors with an armor plate surface. Colorundum is a dry powder floated and trowelled into the floor topping. It is composed of powerful coloring agents, fused aggregates, water-proofing and hardening elements and cementitious binders. The colorful non-slip, dense surface is an ideal flooring for indoors or outdoors... on new work or when replacing old floors. Write for further information.

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QUICK, SMOOTH FINISH for brass and bronze castings with this inexpensive bench backstand grinding unit. Tri-M-ite Cloth Belts backed with a "K" Contact Wheel have speeded metal finishing over three times as fast as previous equipment.

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When a 3M Methods Engineer suggested a bench backstand grinder for grinding and finishing brass, bronze and steel castings, steel plates and bar stock at The Oilgear Company, Milwaukee; he may have used the familiar phrase, "It'll pay for itself".

This large user of steel plates, bar stock, forgings and castings gave our Engineer a chance to prove this statement... and the equipment saved its original cost during its FIRST month of operation.

Recapturing the cost of a unit of plant equipment in one month is

unusual, but we can point out hundreds of users throughout the country who have cut grinding and finishing costs and stepped-up production three to four times over previous methods.

If you grind or finish metals, plastics, wood or glass, flat or contoured surfaces, you'll want more information on this production line cost-cutter—Belt Grinding. Write Dept. BW-6 for an informative booklet and, if you like, the services of a 3 M Methods Engineer to help analyze your operations. No obligation, of course.

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Alto Adams has said that the plaintiff, Publicker Industries, Inc., and four other big liquor producers were taking advantage of the act—to create monopolies in alcoholic liquors and coerce retailers to pay "arbitrary, excessive, and unreasonable prices, thereby fixing prices and wholly stifling competition."

• Which Way Monopoly?—Both sides, fair traders and opponents, consider that the other's point of view leads toward monopoly.

Thus, fair-trader opponent J. E. "Doe" Webb (who operates Webb's City, a superdrug-department store in St. Petersburg) called the invalidation of the old law "the people's victory."

On the other hand, John W. Anderson, president of the American Fair Trade Council, crowed that the passage of the new law was a victory over the "spider of monopoly."

#### MARKETING BRIEFS

Price guarantees made by manufacturers to protect the trade against inventory losses (BW—May25'49,p46) are spreading. Mengel Co. will give inventory rebates to dealers if price cuts occur within 90 days from the time they place orders.

"Remembrance" advertising—calendars, percils, blotters, and the like—still booms. The giant in the field, Brown & Bigelow (BW—Aug.10'46,p64), reports the biggest May in its history, up almost 50% over the same 1948 month.

War on plastic dinnerware has been declared by the vitrified China Assn. It has run full-page ads in several hotel publications protesting the invasion of plastic "substitutes" in the hotel dinnerware field. No counterattack from plastics up to last week.

Candy sales by food stores accounted for 30% of last year's \$500-million candy market. And 99% of all food stores now stock candy, says the Progressive Grocer.

Help for drug stores in fighting grocer and supermarket competition in the packaged sundries field is the aim of the New York Pharmaceutical Assn. It has introduced a self-service unit that holds standard brands of cosmetics, toiletries, drugs.

Cincinnati's proposed new Sunday paper (to have been sponsored jointly by Hulbert Taft's Times-Star and the Scripps-Howard's Post) is "in a fluid condition" says S.-H.'s Jack Howard. George Fries, T.-S.'s business manager adds, "There will be a Sunday—but maybe two of them."



## The Long-bow was the Right Equipment at Crecy

In The Hundred Years War, the French were still fighting as they fought during the Crusades. Armored knights on horseback, armed with lances, formed the bulwark of their forces. But at the Battle of Creey in 1346, the English introduced the terrible long-bow—a weapon unknown to the French. From the beginning, wave on wave of French knights fell under its dreadful might. This weapon, then unsurpassed in its military significance, slaughtered the French at Creey. ... at Poitiers. ... at Agincourt... and was largely responsible for the ultimate English victory.

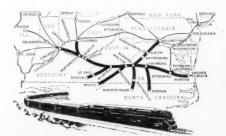
In any task, use of the right equipment is a major factor in doing the job right.

The Norfolk and Western Railway has the right equipment, and uses that equipment to do a dependable transportation job for American industry and agriculture.

During the three postwar years, the Norfolk and

Western invested \$54,559,000 in property and equipment improvements — powerful new locomotives, new freight and passenger cars, expanded engine terminals, a great new merchandise freight pier, improved track, offices, passenger stations, signal systems, bridges, yards and other facilities from one end of the line to the other. And this program of improvements is a continuing job on this railroad. The authorized program of improvements and modernization for 1949 and 1950 will involve the expenditure of \$43,600,000 more.

Through constant research and improvement in equipment and operating methods, the Norfolk and Western strives always to provide better and more dependable railway service. The railroad has and will continue to have the right equipment to do the job right.



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# **EXECUTIVE OPINION**



RESEARCH:

## "Relatively, Industry Has Lost Ground"

Henry Heald fears that industry is letting government take control of science, by failing to put up enough of its own money.

Postwar industry, buffeted by rapid technological changes, has more need than ever before for scientific research. At the same time, government is demanding that science produce the weapons for a pushbutton atomic work, Is industry doing enough to ensure that it gets a share of scientific attention?

Dr. Henry Heald, college president, president of a research foundation, director of companies, practicing engineer, is well equipped to answer such questions for Business week readers. A big, lanky, slow-spoken man, he presides over a group of low glass and concrete buildings in Chicago that form the campus of the Illinois Institute of Technology.

BW: Since the war most people in industry recognize that research has a major part to play. I think that recognition is much wider than it was 10 to 15 years ago.

HEALD: I am sure of that.

**BW:** Once a businessman has come to the conclusion that research has something for him, he gets into the practical question—how much research? How do you approach a question like that?

HEALD: Well, Γm familiar with one company which is now tackling that question. It has two problems: It wants to get as large a share of the market as it possibly can for its normal products; and also it wants to diversify its products so that it is not subject to the ups and downs of the capital goods industry.

BW: Their research problem really

HEALD: Their research problem falls into two parts. The first part, the problem of keeping up to date on their regular products, is not too difficult, because that's something on which you can use productively only about so many people. . . .

BW: The other problem is broader. HEALD: Yes, if that company decides that it wants to go into an entirely new line of business, it has two courses of action. If it has capital enough, it can go out and buy another business. Otherwise it has to start from scratch to develop that business. Of course if you start from scratch you have to have an idea of what you are going to do. . You may find it in your own organization, but you may not.

BW: Where can you look for that

sort of idea?

HEALD: There is no central pointno central clearing house. Of course the universities frequently run across ideas. Sometimes in our research foundations people will bring in an idea which they have partially developed and for which they need some additional research and some capital. That mag-netic recorder of yours is an example of that sort of thing-magnetic recording is the result of some fundamental and a lot of applied research.

BW: Where does the fundamental research come in, sir?

HEALD: Well, the fundamental research on magnetic recording, the basic fundamental research started a long time ago-some 45 years ago-in a physics laboratory and never resulted in anything very successful. The whole science of electronics was almost nonexistent at that time. .

BW: That's just the point. . . . When you pick an idea, it's got to be one that has the supporting sciences. .

HEALD: If the supporting sciences are at the right level; if they're ready. If you get in too early the problem is too big; the problem is too complicated.

BW: Now, at what point in its laboratory career did this magnetic recording thing make the jump to some-

thing practical?

HEALD: Magnetic recording as we know it now was pretty largely developed here on this campus. It began when a very bright young fellow who had developed an interest in electronics . . . in magnetic recording . . . decided he was going to build himself a magnetic recorder for fun. And his recorder worked. It didn't work too well, but it worked. He completed that one about 1940. .

BW: Who was that?

HEALD: Marvin Camras. . . . He has been in the research foundation

BW: In this case, the foundation developed a nearly commercial product before there was any commercial interest in it?

HEALD: That's right, it developed almost a commercial product. Now, that was the result of the war really, because the instrument was in very rough form at the time of the war, but far enough along so that the armed



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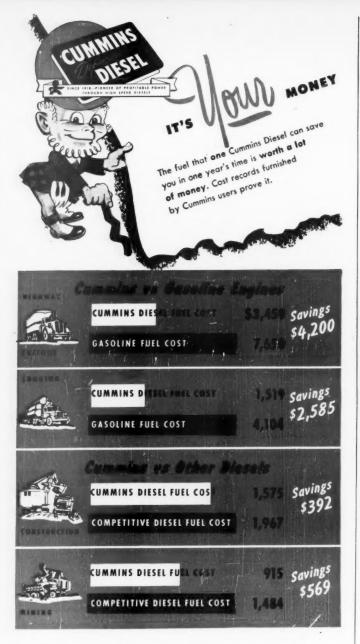
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forces could see its possibilities, and so they asked us to have it made, or to make it ourselves. We got two or three companies interested in making them for the armed forces.

**BW**: Now, if this hadn't come along at a time when the military were looking for ideas . . would it have got to fruition in your foundation before commercial interest was shown?

**HEALD:** We might have ... or Camras might have ... taken the idea to a particular company and sold the idea to the company and the company gone on with it from there.

BW: I have the impression that in recent years both industry and the military are working a lot closer to the frontiers of science than in the past. In the sense, for instance, that forty or fifty years ago people who were developing electric apparatus didn't have to know much about what Clerk Maxwell was thinking or about the fancy physics theories. Whereas I get the impression today that the industrial labs and the pure science labs are working at almost the same level?

HEALD: To a certain degree that is true. Of course, thirty years ago you had very few industrial research labs. It is also true that there is better recognition on the part of industry of just the point that you make . . . that industrial research, application research, only results from the use of new fundamental knowledge . . . and that industry itself has to make some contribution to that new fundamental knowledge as well as applying the knowledge that somebody else discovered. Of course, in the years before 1940 a good deal of that fundamental research was done abroad.

**BW**: Right after the war there was quite a bit of talk about that gap in fundamental research. Are we making any progress?

HEALD: We're making some progress on that. There is more fundamental research going on in the industrial laboratories. On the other hand, it is only the large industrial laboratories which can ever be expected to do any great amount of that . . . the major portion of it is going to continue to come from the university laboratories. So the university laboratories have got their problems; they've got inadequate facilities and inadequate money. . . .

BW: Of course they're getting a good deal of federal support now.

HEALD: They're getting some federal support: the armed forces are spending some \$500-million a year on research and development activities, some of which is being spent on pretty fundamental work. Also, there is a growing recognition on the part of industry that they can help support fundamental research in the educational institutions . . because if they don't do it, they are leaving the job open to complete



"Industry should not let any outside agency do all of its research for it"

government domination, which will be a very unhappy circumstance.

**BW**: You'd rather not see the money coming from the government. . . ?

**HEALD:** I would much rather see it coming from industry, for pure research.

BW: Except for a few large corporations that happen to be in a peculiarly profitable position, it's hard to see how they could justify it to their directors.

**HEALD:** I think they can justify it to their directors; they can justify making some funds available to educational institutions.

BW: How would you go about it, sir? HEALD: There is scarcely an American corporation which doesn't depend upon research. It's got to make use of the graduates of the colleges and universities and it certainly has to make use of the fundamental research which is done in those institutions.

BW: What is the trend today? Is the support of research becoming increasingly governmental or is industry catching up a little bit?

HEALD: I think industry is doing more of that now than industry ever did before. But relatively, industry has lost ground . . . the government is putting in so much more. Government is spending more money on fundamental research now than during the war.

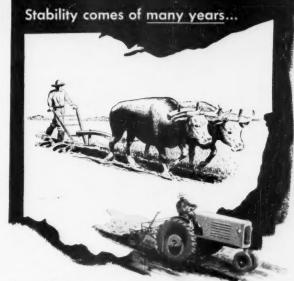
**BW:** So that we have, so far at least, a situation in which science is becoming in large measure a function of government.

**HEALD:** It's becoming too much that way, as a matter of fact—too much a function of government.

BW: A great deal of that government money is military?

HEALD: Most of it is.

**BW**: Of course that has a gravitational effect. This pull . . . this financial pull toward military applications . . .



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#### BUSINESS OPPORTUNITIES

offered or wanted, personnel, financing, equipment, etc., may be found in Business Week's

CLUES

See June 25 issue for next Clues Column.

is it moving research away from the direction which it would follow if industrial considerations were controlling?

HEALD: There is no doubt about that. While it is true that some of the research which is done for military purposes will have industrial applications, it is an inefficient method of getting results for industry.

BW: How much of your work is governmental?

HEALD: Maybe 40% or somewhere in that area: it used to be none. Many of the research institutions are doing almost 100% government work. But the concept that we have always had of our research foundation was that its purpose was to serve industry and we would not like to find ourselves in a position where we were too busy to.

BW: If industry wants to get its share of the scientific and research work, it is going to have to start pulling hard.

HEALD: I think so. Industry should not let any outside agency do all of its research for it; least of all the govern-

BW: It's an expensive proposition. HEALD: It's getting more expensive

all the time.

BW: Does that tend to mean one more advantage that big business organizations have over little. . . ?

HEALD: In some respects, yes; obviously. The small concern has to get its research done by making use of the ideas of the few people who may be intimately associated with that businesswho may be rather productive in ideas but who do not necessarily have elaborate facilities with which to work.

Of course we've gone through a whole change in our concept of the way we get ideas in industry during the last thirty years or so. We used to think of these things as being the work of the inventor-the individual inventor. Industry didn't realize that if they took a group of competent people and put them together to work as a team.

BW: So there is where your big firm has the advantage.

HEALD: Of course the little fellow can make use of the research foundation type of organization. There are now almost a hundred organizations somewhat similar to our Armour Research Foundation.

BW: Take a small firm that can put twenty thousand or so a year into research. How would it go about using a foundation

HEALD: Well! let's take the case of a small concern which has limited . . or even perhaps no research facilities of its own . . but they have the research idea. If they don't have the research idea there is no use in their talking about it. But they know they would like to modify their product.

They can come in to an organization such as Armour Research Foundation.



"Thursday they canceled the project because no one has found an answer.

explain their problem, and have their field looked over by a group of people who are on the staff of our foundation. If the company wants that research program done, it will agree to pay the cost and. . . .

BW: You mean literally, "cost?

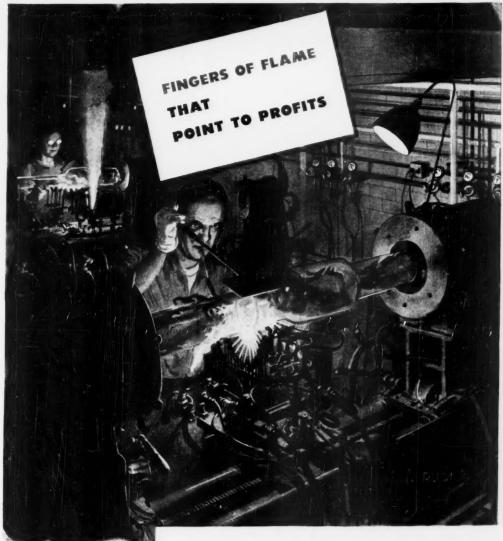
HEALD: That's the way in which we operate . . . on a cost basis. They will have access then to the brain power of 600 scientists and to several million dollars worth of laboratory equipment, none of which they could afford themselves, and the results will be their property. Furthermore, if they get tired of doing it, all they need to say is-we don't want to do it any more.

BW: Is the major share of the work the foundation does for small firms?

HEALD: I expected you to ask that question and the answer is a little embarrassing. When we started Armour Research Foundation we had exactly that concept of what we wanted to do with it . . . that we wanted to serve the small firm. And of course we have served a good many small firms. But it is true that the major share of the research that we have done has been for large corporations.

BW: The reason being that they are more alive to the. . . .

HEALD: They are more familiar with the procedures, problems, and possibilities. Of course I could tell the story . . . the classic example of the small company that came in and said: Well, we want to do some research. They didn't know what they wanted to do any research on, but they wanted to do some research. Finally a project was worked out for them on Monday, and they agreed that they would like to go ahead with it on Monday, and on Thursday they canceled the project because no one had found an answer.



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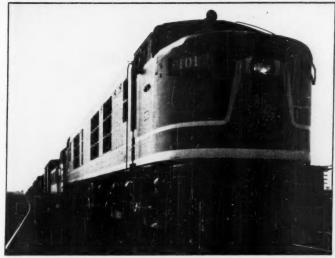
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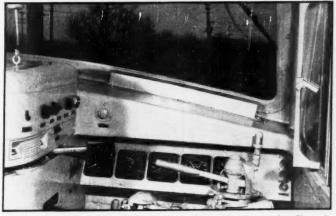
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## Rail Portent: Gas Turbine

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Beginning this summer, the Union Pacific R.R. will put a gas-turbine electric locomotive into revenue service. Full details on it were released this week by its builders, General Electric Co. and American Locomotive Co.

• Pilot Model—The locomotive is actually a pilot model. It has been out on test runs for months. But both G.E.

and Alco have felt all along that the best way to prove its mettle was to put it through its actual operating paces.

#### I. Railroad Revolution?

In the rail-power field, and among powerplant engineers, there has been a lot of talk about adapting the gas-turbine principle to locomotive power. The Swiss have done it already with their

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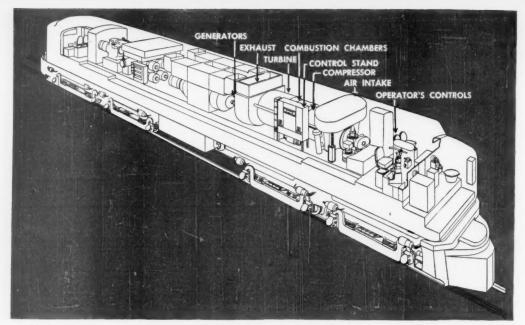


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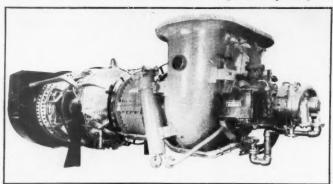
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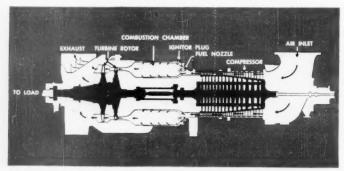
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HEART of the locomotive, a 4,800-hp. gas turbine. It takes in compressed air and low-grade fuel, converts them into electric power. How it works is shown by . . .



INSIDE VIEW: Hot combustion gases drive the main turbine. Turbine drives compressor for combustion air and also drives the generator that powers the traction motors

2,200-hp. Brown-Boveri unit (BW-Apr, 12'47,p56). The tremendous acceptance of the diesel-electric locomotive during the past few years has also been a prod to the engineers. Why, they reason, can't we capitalize on the features of the gas-turbine that make the engine so desirable in aircraft? Undeniably, the gas-turbine offers an intriguing weight-per-hp. ratio; it shows promise of burning lowcost fuels, and its nature is such that maintenance ought to be easy.

• Challenge—Throw facts like that in the face of the railroad people and you start something. Railroad men want the most rail-ton miles at the lowest cost. Up-to now their best bet has been the diesel-electric. Except for overload capacity, it has most of the drawbar advantages of electric power, plus the operating efficiency of the diesel. And it requires less servicing than the steam locomotive (when it comes to deadline time, you can often get as much work from one diesel-electric as from three steamers).

But diesel-electries run only about 2,000 hp. per cab; if you need more hp. you must add extra units. Other factors come into the picture, too. The diesel-electric requires a new kind of automotive-type servicing. And it burns oil, which is a relatively expensive fuel. That's why engineers are continually looking for a power plant that will get around these drawbacks. The ideal, according to some of the experts, is to get back to coal—perhaps by adapting it to combustion in a gas turbine, or some

other powerplant. Coal, after all, is the most plentiful fuel on earth, and about

the cheapest.

• Long Road Ahead-The gas-turbine electric may be what the engineers have been looking for. But you musn't lose sight of this: It isn't going to sidetrack the diesel-electric for a long, long time, if ever. G.E. men will be the first to tell von that. They look on their new locomotive as strictly an experimental unit, a sort of laboratory on wheels. They feel its job will be to prove or disprove that the compact gas-turbine can do a job. G.E.'s announcement this week merely means that the company has outraced other J.S. manufacturers and locomotive builders to get a gas-turbine on the rails.

#### II. The Turbine Itself

The powerplant idea that is stirring up the excitement isn't new at all. It wasn't new when you first heard of it pushing fighter planes at near-sonic speeds. Power men in this country have been playing with the design for 40 years. Scholars can trace its history back to 1680, when Bishop Wilkins in a book called "Mathematical Magick," described a sort of gas-turbine suitable for "a turning of a spit, recling of yarn, the chiming of bells, the rocking of a cradle, and diverse other domestick functions."

• Principle-The principle of the gas turbine is to create hot, pressurized gases by combustion of a fuel. Air under pressure speeds this combustion. The turbine uses the "work" in the gases to do two things: (1) drive the compressor that furnishes the pressurized air to the fuelcombustion chamber; and (2) drive a turbine that drives an electric generator. (Instead of driving a turbine, the energy in the gases can be used for jet propulsion. Jets, obviously, are confined to aircraft use.) In locomotivepowerplant practice, the gases drive a turbine that provides electric power for the traction motors. (In the diesel-electric, a diesel engine drives the generator that provides power to the traction mo-

• Types of Design—You can design a gas turbine in several ways. In one type (the model in widest user, the main turbine drives an air-compressor turbine mounted on a common shaft (picture, page \$4). Combustion takes place in chambers around the circumference of the unit. This type is exclusively a rotating machine. Another design—the "free-piston" type—combines reciprocating motion to compress the air and rotating motion to give power. Combustion takes place intermittently between the heads of two large, opposed pistons. Each of these pistons is connected to an air-compressor piston. When the fuel burns, the opposed pistons are forced



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apart. This causes the connected pistons to compress air; the air then moves through pipes to the combustion chamber. Only a part of the "work" in the gases goes into the air-compression process, however; most of it is used to drive the turbine that runs the generator.

• Pro and Con—Both types have their advantages and disadvantages. The rotating machine subjects turbine parts to a terrific blast of hot gases (1300F to 1400F). That's tough on even the superalloys (BW—Feb.16'46,p46). But even that temperature isn't high enough to give the gas turbine efficiency competitive with the diesel. The rotating turbine can burn Bunker C fuel oil, though, the cheapest of oil fuels. And it may burn coal. Wear, and consequently maintenance, are less on rotating parts, compared with reciprocating parts.

The free-piston idea has an advantage in that the heat from combustion is intermittent. You don't have a materials problem, and you can stand higher combustion temperatures that raise efficiency. But you might have to burn a grade of fuel comparable to that used in a conventional diesel-electric locomotive. And you might have a wear problem with the reciprocating parts.

• Rotating in Front—Both types are getting a close look from manufacturers. But the rotating type probably has the best chance of handling coal in powdered or gas form. That's one reason why the emphasis today is mainly on the rotating type.

#### III. The Locomotive Race

Unscrambling the competitive picture of gas-turbine manufacture isn't easy. There are at least three different groups involved: (1) turbine makers; (2) locomotive manufacturers; and (3) research organizations. These three groups combine, in some cases, to work on a development; in other instances, they work alone. Here are some of the things that are going on today:

General Electric has been working with turbines for some time. The company has sold six gas turbines for power-plant application. Besides, it has done a lot of business in jets with the aircraft industry. The new 4,800-hp. locomotive, developed with Alco, is the product of research that went along coincidentally with other gas-turbine work.

Westinghouse Electric Corp., too, has been working on a version of the gas turbine. That company also has aircraft and government jobs in the field. Westinghouse has in the works a 4,000-hp. locomotive unit for which the company is also building the eab and trucks. It expects the locomotive to be ready for test some time this year. Westinghouse is basing its locomotive-turbine design on a 2,000-hp. unit now running on "life" test, pumping natural

gas for the Mississippi River Fuel Corp. The engine previously had taken a 1,000-hp. simulated railroad test at the Westinghouse South Philadelphia works.

Lima-Hamilton Corp. is working with Westinghouse and the railroads on a locomotive powered by a free-piston gas turbine. The development is just about at the blueprint stage.

Allis-Chalmers Mfg. Co. also has a gas turbine underway for the railroads. Its work is on a contract with the Locomotive Development Committee, a cooperative research group for which the railroads and coal companies pick up the check. A-C's turbine is slated to go into an American Locomotive chassis. It will run on oil or gas, and—the L.D.C. hopes—on powdered coal, if fuel development pans out. A-C says its 4,100-hp. engine will be ready for test late this year, doesn't know when it will get into an actual locomotive.

The Elliott Co. is building two engines. One is an oil-fired job for a Baldwin Locomotive Works chassis. The Santa Fe R.R. is footing the bill for the research. The locomotive is about a year away from test. The other engine is a coal-fired unit for the Locomotive Development Committee.

Fairbanks, Morse & Co. is also doing research on the gas turbine. But the company doesn't think the gas turbine offers any real advantage over the dieselectric, at present. It believes the diesel-electric will continue to dominate the railroad-power field.

General Motors Corp.'s Electro-Motive Division backs this up. Its plans for gas-turbine applications are still in the talking stage with the company's Allison Division.

The feeling among locomotive makers—and very possibly the railroads—is that the diesel-electric has proved to be a mighty good answer to the cost problem. Any gas-turbine use today, they feel, is highly experimental; it doesn't mean any real competition for a long time.

#### IV. G. E's Locomotive

The diesel-electric locomotive today delivers about 30 hp. per ft. of length; it needs about 18 lb. of material for each unit of hp. G.E.'s locomotive delivers close to 53 hp. per ft., takes about 6 lb. of material per hp. The locomotive's design, nevertheless, is complex. Height and width, for example, have to conform to railroad limitations; units must be less than 100 ft. long; axle loads can't exceed 60,000 lb. The locomotive has to carry enough fuel to last 12 hr. and the system must handle a low-grade fuel (it has to be heated to flow). Then, too, there has to be equipment to handle huge quantities of filtered air (70,000 cu. ft. per min.—



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# EMYERS FANS

Springfield 99, Ohio - Brentfard, Onterio MOTORS - MOISTS - CRANES - MOYNO PUMPS four times that used by a diesel for combustion).

The new locomotive is 83 ft., 7½ in. long; 300 of its 4,800 hp. are used to iddrive auxiliaries. The design includes, as far as practicable, standard components of the diesel-electrics (trucks, traction motors, controls). The only untried part of the design, then, is the powerplant and fuel-handling system.

Problems—The first unknown that operators will face is the locomotive's life expectancy. G.E. engineers figure on 15,000 hr. between major overhauls (the diesel overhaul interval is about one-third of that). The engineers think that the history of rotating engines shows that longer overhaul intervals are practical. But only years of testing can prove it.

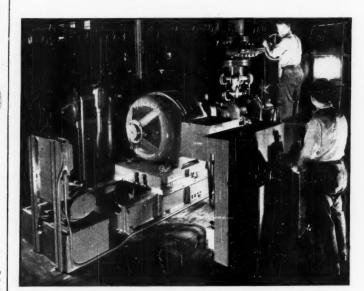
A second unknown is fuel. The powerplant is less efficient than a diesel. Engineers think they can improve its efficiency, later on, by design and metal improvements. But the gas turbine is a poor idler; it consumes one-third as much fuel at no load as it does at full load. And railroading is anything but a full-time, full-load operation.

Another question that only road tests can answer: What effect will weather have? The gas turbine delivers more power in cold weather; how much efficiency it will lose in hot weather remains to be seen. Variation in locomotive weight is another worry. Fully fueled, the locomotive carries 50,000 lb. of fuel. That adds weight and gives extra traction. But when the fuel supply is low, the loss of weight gives the locomotive the equivalent of seven, instead of eight, driving axles. What does that mean, the engineers ask, in terms of ton-miles hauled?

G.E. engineers will get the answers beginning this summer. Then they can start evolving an improved design. They know it will be slow work.

#### V. Steam Entry

Meanwhile, the steam experts are a long way from giving up the fight. Although the diesel-electric has taken over the new locomotive market, there are still 30,000 to 35,000 steam engines in service. Westinghouse, Babcock & Wilcox Co., and Baldwin have



#### Speeding Up Testing Cuts Costs

In some industries every product that comes off the production line must be tested. Such 100% testing can be costly. For example, in certain electric products, testing costs run as high as 10% of production costs.

So Allis-Chalmers Mfg. Co., Milwaukee, Wis., is doing something about cutting down the cost of testing centrifugal pumps at its West Allis works. The company has made motor couplings and connections easier to handle. Movable hydraulic-powered pedestals on the test blocks allow the operator to line up pumps and motors quicker. Motors have a wide range of speeds and horsepowers; they don't have to be switched to meet specifications of a particular pump. Pipe is lightweight aluminum, doesn't have to be handled by cranes.

The company figures that its improvements have cut the time and labor required for testing by 60%.

something new in the steam-locomotive line up their sleeves. It's a wholly new steam turbine-electric locomotive built around a water-tube boiler. Design studies, they say, show that the locomotive will use half as much fuel to give the same power that present steam locomotives produce.

#### PRODUCTION BRIEFS

Longer life for fluorescent tubes has been achieved by Westinghouse through use of sturdier electron-emitting electrodes. They make tubes last 7,500 hours, increase quantity of light 15 times.

Stream pollution by phenol waste from byproduct coke plants has been cut 80%, says Olno River Valley Sanitation Commission. The closed-circulation removal system—which also recovers phenol as a usable byproduct—did the trick.

Radiant heating in home or office has no ill effects on carpets or rugs. But the floor coverings do act as insulators, so you need slightly increased temperatures. For study by Carpet Institute, write 350 Fifth Ave., New York.

Banox, a phosphate compound developed by Calgon, is being used by Timken Roller Bearing to coat steel-tube stock. When stock is drawn cold, it (1) permits greater reduction per pass. (2) causes less damage to tubing and dies, (3) helps retain lubrication.

Beneficiation of coal, gas, oil, and minerals will be the main topic at this year's meeting of the American Institute of Mining & Metallurgical Engineers, Sept. 25 to Oct. 1, at Columbus.

No royalty fees will be charged by Dow Chemical for the use of its magnesium-plating process. Licensing agreements waive royalties anywhere in the U. S., but provide that Dow has free access to any process improvements made by the licensees.

Soil over asphalt is the basis of the Bureau of Reclamation's new method for treating irrigation ditches. System sprays asphalt to waterproof sides and bottom, adds a 1-ft. layer of dirt to protect the asphalt against sunlight and animal damage. Costs 90% less than concrete lining.

Creation of Tin Research Institute means free technical service to users of tin in U.S. Offices at 492 W. Sixth Ave., Columbus 1, will handle inquiries or requests. Institute will sponsor research at Battelle Memorial Institute.

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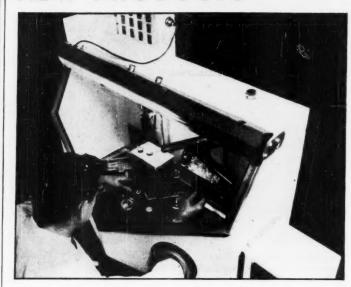
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## **NEW PRODUCTS**



#### Table-Top Laboratory

For handling radioactive or other hazardous materials, Radioisotope Applications Co. has developed a miniature laboratory. Because so much radioisotope work is based on micro-chemical techniques, says the company, an entire laboratory will fit into the box.

Glove ports make the laboratory safe to use. Special gloves on the inside of the box protect researchers' hands. The lab keeps the contamination area confined practically to the box. Thus, it cuts down on the cost of installing decon-

tamination processes.

Radioisotope Applications, a division of Scientific Service, Inc., developed the box primarily for work with radioactive substances. But it can be used, with minor alterations, for bacteria, viruses, and poisonous substances. It can be adapted for almost any type of experimental work that needs a controlled atmosphere.

A very slight vacuum inside the box cuts down the spread of contamination, by shifting the air pressure inward rather than outward. A small centrifugal exhaust blower produces the vacuum. The exhaust air is filtered to remove dust particles and spray. Special traps can also be installed between blower and box, to remove corrosive vapors and radioactive gases.

The box itself is made of plywood. It is treated inside and out with a protective coat of white vinyl-base paint.

For the front of the box, you may use any one of three panels, which you can remove with release screws. Two circular openings form the glove ports. If you specify, the maker will add more openings.

There are two kinds of gloves for fitting into the glove ports: latex surgical gloves vulcanized on to heavier natural rubber gauntlets, and chemical-weight neoprene gloves.

For experimental hookups, a combination of electric receptacles can be mounted inside the box. Auxiliary controls such as rheostats, fixed or variable transformers, and rectifiers can be connected inside the miniature lab. The company is at 1834 University Avenue, Berkeley 3, Calif.

· Availability: Immediate.

#### Tension Wrench

Sunnen Products Co. recommends its tension wrench for applications where nuts and bolts are tightened to predetermined specifications. Tightening auto cylinder heads, bearing caps, and spark plugs are examples.

The handle of the wrench is calibrated in both foot-pounds and centimeter-kilograms: the operator sets the calibrated adjustment to the desired tension. A toggle action releases the pressure when you reach the tension you want. The selected tension setting remains fixed until changed manually.

The wrench has a maximum limit of 100 foot-pounds; a specially designed extension will increase this to 150 foot-pounds.

The centimeter-kilogram scale, says the manufacturer, makes the wrench ideal for setting parts to specification on foreign equipment. The company is at St. Louis 17

· Availability: immediate.

#### Self-Closing Cover

Any 30-gal. or 55-gal. drum can be converted to a container for inflammable material by attaching a self-closing can cover developed by Protectoseal Co., 1920 S. Western Ave., Chicago 8.

The cover fastens to a drum by a single bolt that tightens a steel band around the top edge. If the temperature in or around the drum reaches 160F, a fusible link melts and releases a springloaded plunger on the cover. This closes the cover instantly, snuffing out fire inside the drum or protecting its contents from outside blazes.

The 55-gal. size weighs 17 lb.; the 30-gal. size, 14 lb.

The company recommends its selfclosing cover for use in shipping rooms, stock rooms, and basements where inflammable materials are stored.

· Availability: immediate.



#### Small Stamper

A desk-model postage meter, with all the features of the standard meter, is a little larger than a dial telephone. It is intended for use by small businesses, professional men, even busy households. Pitney-Bowes, Inc., Stamford, Conn., is the manufacturer.

The user dials the stamp value he wants, inserts an envelope, and presses a lever. A moistening mechanism inside the machine seals the envelope while it's being stamped. A small container of gummed tape turns out postage for parcel post and bulky pieces. The machine automatically counts up the postage used and postage on hand in dollars and cents.

The machine has a small carrying case of modern airplane luggage. The com-



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New Osborn Power Driven Buffbrush\* speeds production, reduces "rejects" of stainless steel parts produced by The D. L. Auld Co., Columbus, Ohio.

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A door knob that doesn't have to be turned is molded of Tenite plastic.

The device consists of a Tenite handle that is screwed on the door. It contains a push-button and a standard-size key hole. The push button is set flush in the middle of the handle. When you press the button, it releases the latch bolts, and the door can be opened. Closing the door re-cocks the latch.

A set of handles and corresponding latch and catch plates are easily installed, the manufacturer says. The device will also fit the recess of an old lock.

The knob comes in combinations of 12 different colors. The maker: Canadian Automatic Latch Co., Ltd., 103 Woodycrest Ave., Toronto.

· Availability: immediate.

#### P. S.

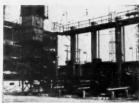
Typists' tape, Kum-Kleen speeds up corrections on duplicator master sheets. Typist presses the tape on the reverse side of master behind part to be corrected, then types in proper wording. The maker is Avery Adhesive Label Corp., Monrovia, Calif.

Remote control for television receivers regulates sets from distances up to 50 ft. Transvision, Inc., New Rochelle, N. Y., makes it. The control turns the set on or off, tunes in stations, and con-

trols contrast and brightness.

Polarized rear-view mirror for autos is said to reduce reflected light 17%. The Polavision mirror is designed to tone down reds, yellows, whites, and blues, as well as infra-red and ultraviolet rays. It's effective during both day and night, says the maker, Sparton Automotive Division of Sparks-Withington Co., Jackson, Mich.





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#### AVIATION

## Supers at War

Congress' probe of superbomber vs. supercarrier grows from a morass of charges. But questions are real, and vital.

The wrangle over long-range bombers versus supercarriers—plus congressional investigation of the Air Force's B-36 bomber—is so confused by dubious charges that the basic issues are obscured. The following roundup from the McGraw-Hill Washington Bureau sorts out the real questions, untangles the case for and against the bomber.

The B-36 superbomber spearheads the U.S. striking force today. If a sneak attack should hit us tomorrow, it would be up to the B-36 to strike back.

Is the B-36 the best weapon for the job? Congress and the people are pressing for an answer.

• Importance—The road to the facts has been pretty well shadowed by bickering and innuendo. Opponents of the B-36 have made charges, which, on the surface, have the impact of another Teapot Dome. And until all the evidence is in, it looks as though the 70-group Air Force would be hung up, as well as the Tydings bill giving new power to the Defense Secretary.

Stakes in the bomber business run high. They mean:

- Starvation or plenty for some aircraft companies;
- Limelight or shadow for some military strategists;
- A powerful or a weak military machine for the nation.
- Strategists Differ—The battle of the superbomber started more than a year ago. It was really a dispute over the new "striking force" strategy. The strategy aimed to have weapons with which to retaliate against an attack—immediately, and with enough impact to slow the enemy down until our total war effort got going.

The big question was: Should the key be the Navy, with a "supercarrier" as a base for long-range bombing? Or should it be the Air Force, which insisted it could deliver the atom bomb anywhere from U.S. bases?

The argument ended in a "compromise"—an expensive one. Striking-force strategy would utilize both the Navy's carrier and the Air Force's bomber. But the bomber—and the Air Force—got the coveted spearhead role.

After some bickering, the Air Force settled on Consolidated Vultee's B-36 for the job. The choice made bad read-

ing for some of the other big aircraft companies.

• Talk—Then the whispering started in Washington-at cocktail parties, and over the dinner table. It ran like this: "It couldn't be anything but the B-36. Floyd Odlum owns Convair, and he put a lot of dough into the President's campaign."

There were stories that Air Force Secretary Stuart Symington was ordering a lot of B-36's, because "he is going to merge all the aircraft companies into the Odlum company, and he'll head the combine." The gossips talked softly; they didn't have much to go on.

Then Louis Johnson, Washington attorney and representative of Convair, was picked for the job of Secretary of Defense. He had managed the finances of the Truman campaign

One of Johnson's first official acts was to stop work on the Navy's 65,000-ton

• Report to Congress-The gossips took a deep breath and turned on the heat. Rep. James E. Van Zandt (R., Pa.), a reserve Navy captain, took the "reports" on the plane to the floor of Congress.

He pointed out that he "didn't say all these reports are true;" he did say they were so persistent "as to require a congressional investigation." The investigation is under way.

Symington immediately and vigorously denied all charges concerning him. Johnson and Odlum have ignored them.

What are the real issues for the investigators to probe? They boil down to three chief questions:

(1) Is the B-36 as good-as it has been sold to be? Is there another plane which can do the job better?

(2) Will the latest strategy-the striking force based on an airplane alonepermit a full-scale prosecution of a war? (3) Why was the supercarrier washed

We can't answer these questions now. They are bound up in "military security," confused by partisan battle. But the congressional investigators can-if they dig deep enough.

These facts seem to have a ring of truth about them:

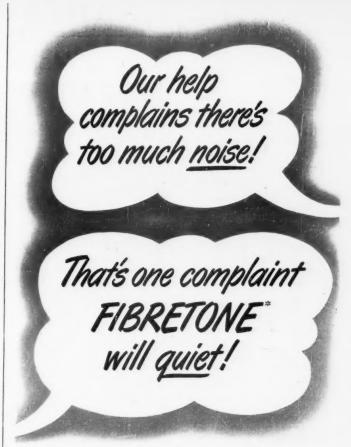
THE B-36 CAN FLY 10,000 miles with 10,000 lb. of bombs.

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## FINANCE

# How to Make a Small Fortune



STARS Ezio Pinza and Mary Martin are two good reasons why South Pacific is the season's smash hit. Other important ingredients are . . . .



BRAINS Richard Rodgers, Joshua Logan, Oscar Hammerstein II, Leland Hayward (left to right) who built the show on a businesslike basis

# on Broadway

e

South Pacific had the biggest advance sales on record, may become the highest grosser. Smart management did it.

It's a good question why anyone ever risks a nickel on a Broadway play. To be sure, you can make money of the Great White Way; but you can also lose it—in large chunks. And the mathematical odds are dead against you.

For instance, in the season just closing there were 47 failures, only 15 hits. Variety, the trade paper, estimates that the hits cost some \$1.9-million to produce, and at last count had earned back about \$2.2-million. But the backers of the flops dropped around \$4.5-million. They may pick up a little of this during what's left of the theatrical season in town or on the road.

 Rising Costs—Backing a turkey isn't the only worry of latter-day angels. The hits have their problems, too. For like other businesses, the commercial theater is beset by rising costs and breakcen points.

All this makes the fabulous success of a relative newcomer—the musical South Pacific—even more fabulous. If it keeps up its present clip, it may become the biggest grosser of all time. That would mean topping such successes as Annie Get Your Gun (whose estimated Broadway take was \$5,800,000, plus \$2,700,000 on the road, excluding forcign); Oklahoma (\$7,110,000 on Broadway, \$11,500,000 so far on the road, excluding foreign); Carousel (\$4,250,000 on Broadway, \$2,600,000 on the road).

• Smart Management—Should South Pacific set a new record, it will be due, in large measure, to smart management. Unlike many a play, South Pacific was well planned right from the beginning.

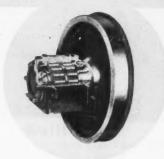
There wasn't the usual expensive rewriting, rejiggering, and recostuming after the tryout.

The casting was superb. Both stars, Mary Martin and Ezio Pinza, fit their roles to a T, are cooperative workers. And South Pacific has a bookkeeping system that tells the backers what's what, instead of giving them wishful thinking. An expense is put down as an expense—then and there. The common practice of "carrying forward" production expenses until after the show opens is not tolerated.

From its very start, South Pacific has



# Use HYATT ROLLER BEARINGS



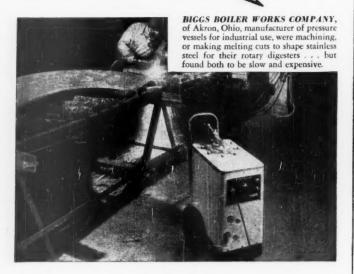
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## HYATT ROLLER BEARINGS

# Flux-Injection Cutting solves stainless steel fabrication problem



Devere Switzer, Airco technical representative, was asked for his opinion. He suggested a relatively new process - Airco's Flux-Injection method of oxyacetylene cutting stainless steel. The necessary equipment was installed, and after a brief testing period was used on production work. Biggs engineers were well pleased with the results - the

smooth cuts were comparable to those obtainable in the gas cutting of mild steel. Further, little machining was required, and the whole operation was speeded up considerably. Moreover, and extremely important from Biggs' viewpoint, it has enabled them to obtain additional orders for the fabrication of stainless steel products.

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Products Company . . . On West Coast: Air Reduction Pacific Company.)

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been a businessman's-as well as showman's-dream.

#### I. Financial Setup

South Pacific is presented by Richard Rodgers and Oscar Hammerstein, in association with Leland Hayward and Joshua Logan. It is adapted from James Michener's book, Tales of the South Pacific. The story adaptation is by Hammerstein and Logan, the music by Rodgers, the lyrics by Hammerstein. It's staged by Logan at the Majestic Theater in New York, a Shubert house.

The play itself is owned by Surrey Enterprises, Inc., which in turn is owned in equal shares by Rodgers and Hammerstein. The production was financed with \$225,000, advanced by about 40

backers in the form of loans.

Earnings will first be used to pay off the loans. After that, half the earnings will go to the backers, half to the four producers. The producers' half is split: 60% to Surrey Enterprises, 263% to Logan, 131% to Hayward.

• Backers — Hayward and Twentieth Century-Fox Film Corp. are two of the major backers. Howard S. Cullman, tobacco man and chairman of the Port of New York Authority, is another. Who the others are, Rodgers and Ham-

merstein won't say.

Author Michener also has a piece of the show, but on a somewhat different basis. He is paying for his 2% (\$4,500) share out of profits. The idea was that, if the show flopped, Michener wouldn't

have to pay anything.

• Corporation—Unlike a great many shows, South Pacific is the product of a corporation-Surrey Enterprises, Inc. It is not a limited partnership such as often springs up on Broadway. From the Rodgers and Hammerstein point of view, the corporate form has advantages

For one thing, the money the pair gets from the show goes into the corporation where it is taxed 38%. If they got the cash as individuals, and heaped it on top of their already mountainous earnings, the rate would undoubtedly be higher.

Another angle: An individual is limited in the amount of losses he can deduct from his income for tax purposes; a corporation is not. So Rodgers and Hammerstein, via Surrey, had a nice hedge in case South Pacific flopped.

#### II. Where the Money Goes

In advancing the \$225,000 in the form of loans, the backers of South Pacific also agreed to put oup a 20% "overcall" (\$45,000) if required.

The show actually took about \$160, 000 in what's called preliminary production expense-that is, costs prior to the out-of-town opening. It opened Mar.



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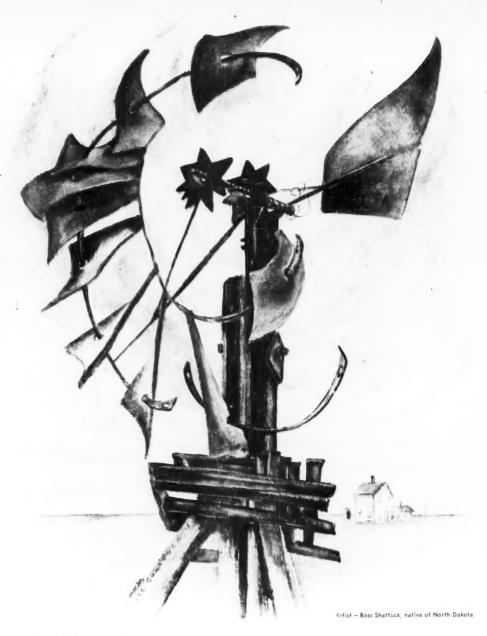




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7 at the Shubert theater in New Haven, Conn., and grossed absolute capacity— \$36,500—that week. It opened at the Shubert in Boston a week later and played three weeks there at absolute capacity grossing \$115,170.

capacity, grossing \$115,170.

• Smash—South Pacific opened in New York on Apr. 7, at a total cost of \$163,-000, having lost the incredibly small amount of \$3,000 on its tryout. It had an advance ticket sale of around \$460,-000—highest on record. It has played to turn-away business at every performance since then. The management set a limit of \$0 standees per performance. Including these (at \$2 each), the gross per week has been just under \$50,600 (without the federal admissions tax of \$20%).

The contract with the Shuberts provides for a theater rental of 25% of the gross up to \$40,000. The house gets nothing on the gross between \$40,000 and \$50,000, but begins to collect 25% on anything over \$50,000. So the rent comes to \$10,150 per week on a gross of \$50,600. It's almost unheard-of for a theater not to share in the complete gross, and frequently the sharing terms are higher than 25-75. (A 30-70 or even 35-65 arrangement is by no means uncommon.)

The Shuberts do not give Rodgers and Hammerstein such favorable terms because they are pals. The point is that a team with such a successful record is obviously in an excellent bargaining

position.

• Split—So rent takes \$10,150 of the weekly \$50,600 gross. The authors—Michener, Rodgers, Hammerstein, and Logan—share a royalty of 10%. It's thought that Michener, Hammerstein, and Rodgers get 3% apiece; that Logan, who "assisted" on the story treatment, gets 1%. Logan also gets 2% of the gross as director. Stars Mary Martin and Ezio Pinza each get 7% (with a guarantee of \$2,000). That's a total of 26% in author, director, and star percentages—or \$13,156. Added to the theater rental, it brings the running expenses to \$23,306.

Other cast salaries, extra stagehands and musicians (the theater pays for a basic crew), rental of lighting and sound equipment, pressagent (\$275), office expense (\$550), general manager and company manager (about \$400 to \$500), share of advertising (around \$1,500), share of ice for the theater's antiquated cooling system (\$700), three employees to handle mail orders, and other items bring the total operating expense to about \$38,000 or \$39,000. The weekly net has thus been around \$10,000 to \$11,000.

• Payoff—The day of the New York opening, the backers got their first return—10%. There has been a second payment (20%), and there will soon be a third (also 20%). The entire investment is expected to be paid off by

about Labor Day. After that, the backers will get half the profits, in line with the terms of the "loan" agreement, as outlined above.

At present plans, there will be a road company of South Pacific in the fall of 1950. Probably it will cost \$120,000 or so, and would be expected to make as big a profit as the original company. There's already active interest by several London managements in the English rights.

• Subsidiary Rights—There will probably never be a film version of South Pacific and it will probably never be done on radio or television. Rodgers and Hammerstein have a standard policy of refusing to sell those rights to

any of their creations.

They believe that all the shows they have written have tremendous long-term value as properties. To sell any "subsidiary" rights at this time would bring them little additional income, as they're already in top tax brackets. And a movie, radio, or television version might actually injure the popular appeal of the properties.

• Steady income—Hammerstein, for instance, says that he still gets what amounts to a comfortable living from royalties for stock revivals of such old hits as Rose Marie, Sunny, Song of the Flame, Desert Song, Show Boat, New Moon, Sweet Adeline, Music in the

Air, Carmen Jones.

So why should he do anything to limit the future of the shows in which he and Rodgers have had a hand—Oklahoma, Carousel, Allegro, South Pacific? He thinks that no matter what might happen to his future creative cfforts, or what misfortune might occur, he is sure of a handsome income from these hits for life—plus the lifetime of his children and grandchildren.

#### III. Rodgers & Hammerstein

Oklahoma—the prior Rodgers and Hammerstein hit—was done by two road companies during the 1948-49 season and will have at least one production during the 1949-50 season. It is running in London, South Africa, Australia, and the Scandinavian countries now. It may have at least one company playing in the U.S. more or less permanently. Carousel will be produced in London next winter and it may go out on tour again in this country. Oklahoma, Carousel, Allegro were produced by the Theatre Guild, but Rodgers and Hammerstein get author royalties and a share of the profits.

 Record—They are the producers (but Irving Berlin is the author) of Annic Get Your Gun, which recently closed a successful tour and is now playing in Britain and Australia. They produced and still get revenue from I Remember Mama and John Loves Marv, and they



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June 8, 1949.



have scheduled for fall production a play by Samuel Taylor, called The Happy Time

Rodgers and Hammerstein have AA ratings (the highest) in the American Society of Composers, Authors & Publishers; they are partners in Williamson Music, Inc., which publishes their music. There's no way to make even a rough guess on their incomes. But they're both obviously making a fantastic amount of money. Despite their success, they are two of the best-liked and most-respected people in the theater, as well as two of its most intelligent, efficient, and reputable businessmen.

• Hammerstein—Until the success of Oklahoma, Hammerstein had an uninterrupted series of flops for 10 years. Everyone thought he was washed-up. Now he is president of the Authors League of America (parent organization of the Dramatists Guild), vice-president and board member of A.S.C.A.P., and an active member of countless committees.

• Rodgers-Rodgers is the more dynamic member of the team. He tends to be a worrier, with more "artistic temperament" than Hammerstein. The team reverses ordinary procedure: Hammerstein writes the lyrics first, then Rodgers sets them to music.

Rodgers is a lightning workman, composing the music for a number in a matter of minutes sometimes. Hammerstein, on the other hand, takes as much as six weeks to work out the lyrics of a song. Rodgers is a former president of the Dramatists Guild, is a member of its council and the council of the Authors League.

Before teaming with Rodgers in the writing of Oklahoma, Hammerstein collaborated with Otto Harbach, Frank Mandell, Carv Duncan, M. H. Gropper, Lawrence Schwab, Henry Myers, Laurence Stallings, Dwight Taylor, and Jerome Kern.

Rodgers' only previous collaborator was the late Lorenz Hart, with whom he wrote, among others. The Girl Friend, A Connecticut Yankee, Present Arms, On Your Toes, Babes in Arms, I Married an Angel, Boys from Syracuse

• Collaborators—Rodgers and Hammerstein teamed up through Lynn Riggs' folk-drama. Green Grow the Lilaes, which had been an artistic success—but financial failure—for the Theatre Guild some years ago. The Guild towed with the idea of a musical, finally asked Rodgers to do the score. He took Hammerstein to lunch and broached the idea of collaboration. That suited Hammerstein down to the ground: He had just made an unsuccessful attempt of his own to get Jerome Kern to do the

The show, retitled Oklahoma dur-

ing the Boston break-in run, pulled the Guild out of a financial hole and established Rodgers and Hammerstein. After that, there has never been any question of raising finances for any show written by the two.

#### IV. Rest of the Team .

But neither Rodgers nor Hammerstein first got the South Pacific idea. Leland Hayward was the catalytic agent responsible for converting the Michener book, Tales of the South Pacific, into the musical, South Pacific.

• Hayward Touch—He read the book while vacationing in Florida, took an option on the stage rights. This is a common Hayward practice. He did the same thing with Thomas Heggen's Mister Roberts, later got Logan and Heggen to adapt it. (One result of this was the birth of Leland Hayward, Ltd.; but Hayward—although the firm has his name—owns only a third, Logan the rest.)

Logan read the Tales at Hayward's suggestion, gave a copy of it to Rodgers and Hammerstein to see what they thought of it. They were enthusiastic—so much so that they decided to do the musical.

#### FINANCE BRIEFS

New purchases of open-end investment trust shares (BW-Mar.26'49,p93) came to almost \$80-million in the first quarter of 1949. Last year's first-quarter tally was only \$62.5-million.

Preston Tucker (BW-Apr.23'49,p102) has been indicted by a federal grand jury on charges of mail fraud, of violating the 1934 securities act, and of conspiracy. Also indicted were (1) six others identified with Tucker Corp., and (2) Floyd D. Cerf, whose company handled the corporation's first stock issue.

R. H. Maey's sales were only off 5% from last year in the quarter ended Apr. 30. But its profits (\$965,000) sank 46%.

New York City's 2% sales tax, 5% levy on parimutuel betting, 5% tax on transient hotel rooms, 3% tax on utilities' receipts have been renewed for three years. But they barely squeaked through the city council.

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## THE MARKETS



## Stocks Break Old Bottom

But businessmen still aren't sure that they know which way they are heading. That's because the market wavers too much to show trend. Traders may take a cue from second-quarter earnings.

The stock market registered a vote of no-confidence in the future of business this week. Then, it halfway took back its dismal prediction. As a result, Wall Street doesn't know where it stands now. And businessmen, looking to the stock market for a hint as to which way the country is headed, are more than justified in saying. "To hell with it."

• Below Resistance Points—Both the Dow-Jones averages have cracked their resistance points now. The industrials broke 3.01 points in a day and wound up at 161.60, well below their old bearmarket bottom of 163.12. The rails got down to 41.03. That was also under the resistance point (41.16), but the ponetration was less than the full point that the chart readers demand.

From a technical standpoint, there still hasn't been a decisive test. Volume picked up a little on the break, but the spurt didn't last. And immediately after the averages had punctured the old resistance points, they managed a rally. At midweek, they were back in the old support area. And volume was too light to give any real meaning to their moves.

• Down, by Dow—But the fact remains that the resistance points were broken, resistance points that had held again and again through the 1946-1948 bear market. That means that there is no longer any sort of floor under the market. And according to the Dow Theory, it means that the major trend in the market is downward. Bears are talking of a drop to something like 150 on the industrials.

If it's any comfort, though, you can

#### Security Price Averages

This Week Month Year Week Month Year Week Ago Ago Stocks
Industrial 133.0 134.8 145.9 168.7 Railroad. 34.6 35.8 39.4 50.8 Utility... 69.5 70.4 73.6 73.9 Bonds

Industrial 98.9 99.1 98.8 98.3 Railroad. 80.4 80.3 81.3 90.1 Utility . . 96.5 96.2 95.6 96.1

Data: Standard & Poor's Corp.

remember that the market hasn't been behaving according to Dow Theory rules for the past three years. Last spring, for instance, happy chart readers finally got a clear-cut bull signal. The bull market petered out about a month after the signal.

• Shorts Busy—A probable reason the bears had trouble following through on this week's break was the big short interest. As of mid-May, short sales of 1.6-million shares were on the books, the biggest total in 16 years (BW—May28'49.p95). Undoubtedly, some of the shorts decided to take their profits and go home when the market broke.

But short covering alone doesn't explain the market's off-again-on-again performance. The plain fact is that stock traders haven't yet decided how seriously they should take the dip in general business. They are worried about it, and they think it is going to continue for a while. But they know stock prices have discounted a slump—at least partially. The question is whether they have discounted it enough.

• Statements Test—Many traders are waiting now to see what second-quarter carnings statements will look like. If the drop in corporate income turns out bigger than they expect, the market will almost certainly take another dive. If the reports don't look too bad, there's a good chance that stocks can stage a modest rally during the summer.

### Preferreds Resisting Market Downtrend

Preferreds this year haven't been following the pattern set by the common stocks. Instead, they are about the only bright spot left in a dismal market picture.

Among the preferreds you now find more individual 1949 price gains than losses. And those that did decline generally, dropped less than the commons.

On the other hand, the preferreds as a whole haven't been very spectacular, either. It's to be expected that senior equities show a stronger price tone than common stocks when a bear market is on.

Note also that investors seeking the greater safety that preferreds normally provide are buying with care. They have been showing definite partiality for those blue-chip issues which over the years have proved that they can live through business famines.

	1948	10.10	Range	Recent	1940
Issue and Dividend Rate	Year End	High	Low	Price	Gain or Los
Allegheny Ludlum Steel \$4.50	\$100.00	\$104.00	\$95 25	\$87.00*	-13.0%
American Can 7%	173 00	181 25	172 50	180 75	+ 4.5
American Car & Foundry 7%	79.00	82 00	60.00	63.00	-20.3
American Smelting & Refining 7%	151.00	154 50	142.00	150.00	- 0 7
American Sugar 7%	122.00	126,50	120 00	118,25*	- 3.1
American Tobacco 6%	135.00	149 50	135 00	149.50	+10.7
Atchison, Topeka & Santa Fe 5%.	101 62	103 25	97.62	97 62	- 3.9
Atlantic Refining 3% %	95 12	98 37	94.75	95.00	+ 0.9
Bethlehem Steel 7%	131 50	136 87	129.50	130 00	- 1.2
Colgate-Palmolive-Peet \$3.50	89 00	94 50	89.00	94.00	+ 5.6
Container Corp. 4%	95 50	97,50	93.00	93.00	- 2.6
Corn Products Refining 7%	171 50	181.00	171,50	181.00	+ 5.5
Corning Glass \$3.50 (1947 Series)	93 00	99.00	92.50	99 00	+ 6.5
Crown Zellerbach \$4	95 00	96:00	90 00	89 00*	- 6.3
Dow Chemical \$4	103 00	105 00	101.87	104.00	+ 1.0
Eastman Kodak 6%	164 00	180 00	164.00	177 00	+ 7.9
Firestone Tire & Rubber 41/2%	105 87	107.37	105.00	105 50	- 0.4
General Foods \$3.50	93 50	97 50	93,87	96.75*	+ 3.5
International Harvester 7%	165 00	175 00	164:50	175 00	+ 6.1
Island Creek Coal \$6	145,00	148,00	138.00	138.00	- 4.8
Johns-Manville 312%	106 00	110 25	101 00	102.50	- 3.3
Liggett & Myers 7%	170 00	176.00	170 00	176 00	+ 3.5
R. H. Macy 414 %	95 00	100.50	95.50	99 00	+ 4.2
Monsanto Chemical \$3.25	103_00	111 25	102.12	102,12	- 0.9
National Biscuit 7%	172 00	178.00	170.25	178.00	+ 3 5
National Lead 7%	170 00	177 50	169.50	174 25	+ 2.5
Republic Steel 6%	104 50	110 00	91 50	91 50	-12.5
R. J. Reynolds Tobacco 3.60%	85 00	92 37	84 25	91 75	+ 7.9
E. R. Squibb \$4	100 00	103 25	100 00	102 75	+ 2.8
Standard Brands \$3.50	88 50	89 50	82 00	82 00	- 7.4
Sylvania Electric \$4	80.50	89.00	81.00	81.00	+ 0.6
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U. S. Gypsum 7%	173 00	183.50	175 00	177,00	+ 2.3
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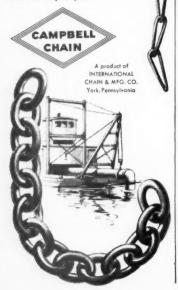


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## LABOR

# Fourth-Round Setback for U.E.

Electrical workers' strike at Sunbeam folds after one week. Rank and file support was weakening -but union claims strategy shift was behind back-to-work order.

The first major fourth-round wage strike flopped last week-on the eve of contract bargaining in some of the na-

tion's most important industries.

• U.E. Setback-It was C.I.O.'s United Electrical, Radio & Machine Workers that suffered the setback, at the hands of Sunbeam Corp., Chicago electrical appliance manufacturer. U.E. had billed a walkout on June 1 as a test of the union's fourth-round demand-a \$500-per-year "package" increase for every electrical worker in the plant. But the union quit cold, just one week later, without a single concession from the company.

· Significance-The Sunbeam strike can't be taken as typical of what's ahead on the labor front. But it's a

good indication that:

Management resistance to another round of forced increases in labor costs is stiffening day by day. Plant walkouts aren't likely to stampede employers into making concessions. The outlook is too uncertain; most companies don't want to commit themselves to any pay hikes at this time.

Unions can still muster support for an all-out strike. But in most unions, rank-and-filers are jittery about unemployment. There's very little will for any prolonged strike-particularly in "slow" lines where workers have watched inventories building up in plant warehouses. So while the rank-and-filer may obey a strike call, he may be unusually susceptible this year to back-towork movements.

All this is important because union leaders are now convinced that 1949 may be the last year for the big annual postwar contract gains. They're starting contract talks determined to get as much as they can, peacefully or otherwise. Final settlement terms can depend on the degree to which the rank and file back up the leaders.

• U.E. Demands.-U.E.'s Local 1150 demanded two things from Sunbeam: (1) the pattern \$500 raise; and (2) an end to an incentive system (U.E. calls it a "speedup") that Sunbeam has used for many years. The company turned down both demands; the first because the raise would bring Sunbeam's labor costs high enough to endanger the company's competitive position; the second because it believes the incentive plan works advantageously for both company and employees.

Sunbeam countered with an offer of a 2¢-an-hour raise for incentive workers. and 3¢ for all others. U.E. spurned it, stuck by the \$500-a-year "package." The union admitted, according to Sunbeam, that its national officers had chosen Sunbeam "as the place to put over its package program first, and thus establish the pattern for the national electrical industry.

• Strike Fadeout—The U.E.-Sunbeam contract ran out on May 31. U.E. called a strike for the next day-and ushered it in with more than 800 massed pickets. Despite the picketing, about 160 workers entered the plants. The nonstrikers were mostly maintenance men who hold cards in the International Assn. of Machinists, and A.F.L. patternmakers, operating engineers, and teamsters. The company said the two struck plants would stay open. After the first day, strikers began dribbling back, a few more every day, until about 300 of 2,000 were on the job again.

U.E. dropped its demand to a 7é-perhour raise, and a reopening after 60 days. Sunbeam replied that it wouldn't deal any more with the union until it

ended the strike.

The walkout folded on June 7. Members of the local voted (431 to 33) to go back to work, without a contract. No contract means: (1) no further checkoff of union dues for U.E.; (2) no authorization for union stewards to handle union work on company time; and (3) no U.E. participation in grievance handling.

• Meager Gain-U.E. salvaged only this: Sunbeam agreed to resume contract talks after "past production performance has been restored for a reason-

able time."

• Changed Signals-For the record, top U.E. leaders said there had been a change in union strategy. They had just set the date for contract talks with General Electric Co. for June 14, and with Westinghouse Electric Corp. for June 21. The pattern \$500-a-year demand will come up in both of these negotiatious-so, said U.E., the union has decided to shift the showdown to the big pace-setters

· Other Factors-Even if that's sp, it's not the whole reason for the surrender at Sunbeam. It's no secret in Sunbeam Local 1150 that: (1) The strike was unpopular with the rank-and-filers, who felt jobs were at stake; and (2) both I.A.M. and A.F.L. were getting set to try to take bargaining rights away from U.E.

Meanwhile, Chicago offers another hint that U.E. recognizes the difficulties of winning a fourth-round strike. Union members are staying on the job in the Stewart-Warner Corp. plant, although the company has canceled its contract with the union. Usually a cancellation sets off quick strike action. Another company move—discharge of the local union president "for disobeying orders"—also has gone unchallenged.



FEDERAL MEDIATION CHIEF Cyrus S. Ching tells management it should . . .

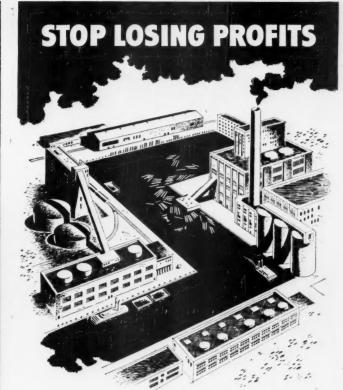
# "Have the Facts"

Management must prepare, by marshalling facts and figures, if it wants to get the most out of contract bargaining.

How do you get ready for collective bargaining with your plant union?

When that question was asked at a management industrial-relations conference last week, one employer quipped: "I start studying some new ways of saying no." Cyrus S. Ching, blunt-spoken director of the Federal Mediation & Conciliation Service, had another suggestion: If you want to narrow the field for major disagreement, dig up plenty of facts and figures to support your bargaining position. Be all set when labor makes its demands.

• Shipping Settlement?—This week, Ching could point to some new evi-



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dence to support his bargaining theory. "Very considerable progress" toward an Atlantic and Gulf shipping peace apparently had ended threats of an important maritime ticup.

d

Ching cited the maritime negotiations last week as an example of contract bargaining by well-prepared union and management spokesmen. Both sides entered contract bargaining, he said, with a full set of facts and figures on controversial issues.

• Issues—The negotiations involved Atlantic and Gulf ship lines and three C.I.O. unions—the National Maritime Union, American Radio Assn., and Marine Engineers Beneficial Assn. Issues at stake included questions of wages, hours, and the union's "hiring hall" method of manning ships.

FMCS intervened when negotiations deadlocked. Ching headed the conciliation team

By midweek with no lost time or motion—because both sides had complete facts—the federal men had cleared up most disputed issues.

• Labor Does Better—Ching took time out from the maritime conciliation last week to talk like a Dutch uncle to an American Management Assn. conference. One observation: Labor often does a better job at the bargaining table than management; it does so by better preparation—more facts and figures bearing on issues in dispute.

He warned that management too often is inclined to take an emotional approach to bargaining. It knows just how far it can go without upsetting its economic balance—but it doesn't always marshal the statistics that support its argument. Result, says Ching, is that the management men often flounder about—and sometimes blunder.

• To Avoid Disputes—In either case, there's fertile ground for labor disputes in any debate that lacks basic figures from either side. And, according to Ching, there's more chance of averting serious disputes when both sides put their cards on the table.

# Some Workers Go Back At Warner & Swasey

Three weeks ago, President Charles Stilwell of Warner & Swasey Co., in Cleveland, sent a personal letter to production workers who have been on strike at his plant since last Dec. 27. This week the letter began to be answered. A trickle of workers passed through picket lines, and Warner & Swasey production started up again.

 First Break—The slight back-to-work movement was the first break in 22 weeks—the longest strike in Cleveland in more than a decade.

The International Assn. of Machin-

ists (Ind.) struck Warner & Swasey in a dispute over wage rates (BW-Mar. 5'49, p98). The walkout of 1,800 production workers snapped a 33-year company record of peaceful labor relations. Despite periodic efforts to get peace talks started, negotiations between the company and I.A.M. are at a standstill.

· Expression of Opinion-Recently, Stilwell decided to ask idle employees what they thought about resuming production at the struck plant. He got a number of replies-most of them saying that a work resumption would be welcome. So, without fanfare or public announcement, plant gates opened again this

At midweek, 72 workers were checked through the gates, while hundreds of strikers watched without interfering, The union shrugged the return off as a "dismal failure." The company said the return wasn't "a grand reopening," that it was merely for workers sincerely interested in going back to work.

• Deadlock—The company has offered

a wage plan which would boost hourly pay by 17¢, but which would end a wartime incentive-pay plan based on seniority. I.A.M. has refused to bagain away the incentive program.

#### LABOR BRIEFS

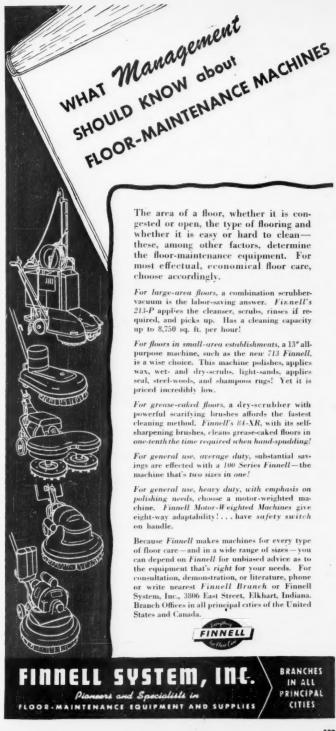
In case of a tie in representation elections, the incumbent union stays. That's NLRB's ruling after a tie vote at U.S. Rubber's Los Angeles plant. The A.F.L. electrical workers were denied a runoff; the C.I.O. rubber workers stayed in.

Runoff election between C.I.O. office workers and A.F.L. insurance agents will be held July 8 among 14,500 Prudential Insurance Co. agents. The A.F.L. union led the ballot in an earlier three-union poll.

Alcoa and C.I.O. steelworkers have put off 1949 wage talks, pending a Big Steel settlement.

New wage boosts: 5¢ to 2,900 A.F.L. production and office employees of the Lustron Corp.; \$23 a month to 2,500 A.F.L. electrical workers employed by the Georgia Power Co.; 8¢ to 2,000 C.I.O. chemical workers at Carbide & Carbon Chemicals' Oak Ridge (Tenn.) atomic plant, to end a strike threat (BW-Jun.11'49,p103).

Political stewards-something new-will operate independently of other shop stewards in the International Ladies Garment Workers (A.F.L.). They will get members to register, guide them on political course of national I.L.G.W.U.





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# Watching Big Steel

As usual, what happens between U.S. Steel and C.I.O. will give the cue for settling other industry talks.

Big Steel wage negotiations got under way this week-once more in the shadow of a coal-mine shutdown.

U.S. Steel 'Corp., and .C.I.O.'s United Steelworkers started talking on June 15. Some 835 steelmakers and 1,000 steel fabricators have bargaining dates this year. But for all practical purposes, fourth-round contract terms for the industry will be set in the tough Big Steel negotiations.

• Union Terms-This year the union wants: (1) a 15e wage increase; (2) a social-insurance program that will cost another 8.4¢ per hour; and (3) a pension program. It will settle gladly for the first two, leave the last for some future

bargaining opportunity.

The steel union also wants a guaranteed minimum weekly wage for members, "for each week worked," and a joint labor-management program to cope with mill layoffs. And it plans to ask steel employers to substitute a union-shop clause for present maintenance-of-membership clauses in contracts. Since this would require com-pliance with the Taft-Hartley affidavit rule, it's an indication that steel union compliance with T-H is in the offing.

"Big Steel" labor contracts run to May, 1950. This month's reopenings are limited to wages and social insurance-but the union interprets these to cover a wide range of issues. If no agreement is reached by July 15, the

union can strike.

On the eve of bargaining, Philip Murray, president of the steel union and of C.I.O., said the union "hopes" there will not be a strike this year. But he added that the union is determined to press wage and social-insurance demands -and believes the steel industry has a "moral obligation" to negotiate a comprehensive social-security program for

• Management Views-Murray cited first-quarter profits as justification for "substantial benefits" in 1949. Management, thinking in terms of future business uncertainty rather than past earnings, wants to stand pat on present contract terms.

The steel negotiations will be influenced by two facts: (1) with steel output dropping off, lavoffs are under way; (2) there's a new industrial uncertainty arising from the John L. Lewis coal maneuvers (page 112.)

· Setback for SKF-Meanwhile, the steel union got a major setback this week in the steel fabricating industry. A Philadelphia local at SKF Industries, Inc., voted almost unanimously to end a four-week strike. It got: no wage increase; social-insurance benefits that the union estimates will cost 4½ an hour; the right to reopen wages once between Sept. 15, 1949, and Aug. 16, 1950.

The new social-insurance program includes: a \$1,500 life insurance program, with a double-indemnity clause; \$28-a-week accident and sickness insurance up to 13 weeks; \$200 surgical benefits; free medical service by company doctors.

Better Luck—The steel union managed a 10¢ raise in another bargaining session. The Pennsylvania Transformer Co., at Canonsburg, gave the increase, plus one additional paid holiday a year. And it increased company-paid sickness and death insurance.

## NLRB Must Hear Jurisdictional Squawks

Whether it wants to or not, the National Labor Relations Board can't stay out of jurisdictional fights if one of the unions brings charges against its rival.

• Must Give Hearing—That's the upshot of a new decision handed down by the U.S. District Court in Washington. Ruling: The Taft-Hartley law requires NLRB to give the union a hearing.

This disturbs the board very much, because under Taft-Hartley it has disposed of more than 100 out of 117 jurisdictional disputes without formal hearings. So it is appealing the decision.

• Idlewild Dispute—The case in question grew out of a dispute that held up construction of the new Idlewild Airport in New York for months. The rival unions—Local 3 of the A.F.L.'s International Brotherhood of Electrical Workers and the independent United Telephone Organization—finally finished the job under a compromise suggestion by Mayor O'Dwyer. But the issue still comes up on other projects.

The issue: Who is to pull telephone wires through a conduit? At Idlewild, I.B.E.W. had jurisdiction for bringing the wires from the pole to the airfield. U.T.O. took charge of the wires inside the buildings. No-man's-land in this case was the 400 feet of conduit in between.

• NLRB's Position—NLRB's regional director in New York investigated U.T.O.'s charge that LB.E.W. was "muscling in" on its jurisdiction, but dismissed it as being without merit. He was upheld by General Counsel Robert N. Denham's office. The independent union appealed to the court, which last week directed NLRB at least to give the union a hearing. NLRB takes the position that it is within its discretion whether to hold a hearing in a case.

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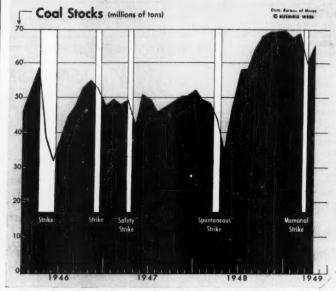


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# Lewis Seeks Stable Output

U.M.W.'s big target this year is job stabilization, with a coordinator to allocate production. Aim of soft-coal strike is to strengthen Lewis' bargaining hand in coming talks.

John L. Lewis will count 1949 a good year if it produces some form of jobstabilization plan for his United Mine Workers. That-more than more changes in wages, hours, and work conditions-is what Lewis wants this year. · Share the Work-To Lewis, stabilization means preventing overproduction of coal-and the price declines, wage cutting, and unemployment that go with big surpluses. It means distributing available jobs by allocating production. Lewis has promised that miners won't go hungry in one coal field while they prosper in another (BW-Mar. 5'49, p15).

• Developments—U.M.W. strategy is aimed in that direction, and has been from the start. This week's major developments in the bituminous industry fit into the pattern. They include:

(1) U.M.W.'s complete shutdown of coal mines for a "brief stabilizing period of inaction."

(2) An announcement that Lewis will open contract talks shortly with northern and western soft-coal mine operators.

(3) A proposal that the soft-coal industry name a coordinator to aid in "permanent stabilization" of the industry. (Lewis also served notice that U.M.W. is terminating anthracite contracts as of Aug. 15, 1949. The hardcoal contract is a continuing one, without an annual expiration date.)

• Shutdown—The bituminous shutdown began Monday, is scheduled to last through this week. Lewis based his order for the layoff on the miners "able and willing" contract clause. Some miners grumbled about the order, but all quit work.

There are two big reasons for the stoppage:

Whopping coal reserves, which now total nearly 70-million tons above ground (cover, and chart above), handicap Lewis in bargaining. Contracts expire on June 30. The usual Lewis threat of "no contract, no work" will lack punch if there's no urgency about digging coal.

The psychological effect of the stoppage has generally been overlooked, but it is of even greater importance right now. What Lewis is saying, in his order for a "period of inaction," is this: U.M.W. can shut down soft-coal mining whenever it thinks it necessary to "protect" the industry. It's going to do so, unilaterally, at the discretion of

union officers-unless industry agrees to cooperate.

• Coordinator—Some kind of coordinator plan has been up for discussion before. Northern soft-coal operators have long thought about naming one man as spokesman—and bargaining guide—for all operators. A large segment of western and steel "captive-mine" operators favors such a plan.

Their idea is to name one man whose job would be "to bring order and dignity into [soft-coal] labor relations—and to avoid the chaos which has too often attended labor negotiations." In effect, the plan would set up on a permanent basis the post formerly filled by the late Charles O'Neill—for years an annual, temporary spokesman for soft-coal operators in contract talks.

Under the industry plan, the coordinator wouldn't have any authority to

limit production.

• Spokesman Plus—Lewis would welcome the coordinator plan—if the coordinator also had authority to coordinate and allocate production throughout the industry. Lewis has offered to cut 1949 demands to the bone if operators will cooperate in the stabilization plan.

Pennsylvania anthracite has had an allocation plan for years (BW—Mar.12 '49.p21). Lewis' program would differ in its machinery, but would have the same general function: to distribute production, or to limit it, if necessary.

The anthracite plan is backed up by a Pennsylvania law. For that reason, it has so far escaped action by the federal

antitrust division.

• Pros and Cons—The latest coordinator plan is getting most support from northern, "captive-mine," and western operators—who represent an annual production of about 200-million tons of soft coal. Southern operators, who mainly bargain through the Southern Coal Producers Assn., are pretty much against the proposal. They are afraid such a plan would hand contract-bargaining reins to the large northern and steelmine operators.

If the industry names a bargaining coordinator, first choice for the big job would be Harry M. Moses, president of the H. C. Frick Coke Co., a United States Steel Corp. subsidiary. Moses has been a key figure in soft-coal negotiations for many years—and has stayed on friendly terms with Lewis despite bargaining differences. The job, as proposed, would be full-time; Moses would have to resign from Frick.

Chances—If a majority of the industry accepts the plan—and Lewis supports it—the southern operators may have to go along, like it or not. U.M.W. can legally quit digging coal in southern nimes any time after June 30. It's hardly likely that the southerners could take a shutdown, while competitors operate.





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FACT FINDERS of BLS: (left to right) Nelson M. Bortz, Harry M. Douty, Ewan Clague, Bureau Commissioner, and Lawrence R. Klein. Their data can be a big help in . . .

# Briefing You for Bargaining

Bureau of Labor Statistics can supply you with a lot of facts for contract negotiations. Besides regular statistics on wages, employment, living costs, it can supply answers to specific problems.

Do you know what the prevailing practice is in industry for time off when an employee's mother-in-law dies?

an employee's mother-in-law dies?

• Who Can Tell?—A large chemicals company wanted to find out when it came up against a demand for paid "mourning" time. For the answer it wrote the Bureau of Labor Statistics in the U.S. Dept. of Labor. BLS sent back 15 "mourning-pay" clauses culled from the more than 15,000 current labor agreements in its files. The company found one clause that was particularly useful: It provided a worker with four days of paid leave when his mother dies, and one day for the death of his mother-in-law.

That inquiry was only one of 250,000 BLS has had in the last year. The number of queries is proof that many employers have found out what unions have long known: that BLS is a mine of information that any citizen can tap.

• Research Source—Right now, with labor-management negotiations in full swing, BLS is probably as rich a place to dig for facts as you can find. For the bureau does a lot more than compile the figures on the cost of living and wage trends. It has on the hook many special surveys by industries, by localities, and by jobs. More important to

you in your negotiations, BLS stands ready to answer questions on almost any bargaining issue.

A communications company, for instance, wanted to know how its wages stacked up with other industries before it sat down at the bargaining table. It wrote to BLS, and got the average weekly earnings in 150 industries. It was able to show the union that the wages it paid put the company third on the list.

In another case, a glass manufacturer had had trouble with the union about work in hot temperatures. Can you send me, he wrote BLS, some contract clauses that refer to temperatures? BLS came up with four. One of them sounded like a good way out: Let the workers decide by secret ballot whether a kiln is too hot to work in.

• Stock Supply—BLS's cache of contracts is kept up to date by a provision of the Taft-Hartley act. The law asks employers and unions to file their agreements with the bureau. BLS gets about 1,000 of them a month, has a total of 15,000 in its record cases. These contracts are open to you—unless they were submitted in confidence.

• Steady Stream-Besides this problem counseling, BLS, of course, regularly

issues a slew of statistics on practically, everything that plays a part in labor relations. It also supplies business with construction figures and wholesale prices. A lot of this material comes out in news releases and in bulletins. Practically all of it shows up in BLS's monthly magazine, Monthly Labor Review.

Here's a rundown of the kind of help BLS can give you in meeting specific

bargaining-table issues:

Cost of Living. Every month BLS issues an index of the average change in

#### Employee-Benefit Guide

More unions than ever are telling their employers flatly: "We'll forego a pay hike this year, or take only a token raise, if you'll write an employeebenefit clause into our contract."

Many local unions are coming into fourth-round bargaining sessions forcarmed, with a model clause furnished by their international unions. It's a wise employer who will take a tip from his union, and come into negotiations forcarmed.

At this point, the Dept. of Labor steps in with some help. It has had a lot of requests recently for some sort of guide on wording employec-benefit clauses. So it put the Burcau of Labor Statistics to work to get the answer.

• Reference Volume—The bureau dug out a number of examples of social-insurance clauses. It put them together into a bulletin, "Employee-Benefits Provisions."

The bureau says the clauses quoted don't necessarily represent prevailing practice or the trend; neither are they necessarily "model" contract clauses. But, says BLS, they do "indicate to some extent the various approaches adopted by certain unions and employers" in solving this problem.

• What's Included—The sampling covers provisions for (1) health and welfare funds; (2) pension and retirement plans; (3) group insurance; and (4) social-security programs. The scope and type of benefits show a wide variation; hence BLS feels the bulletin is pretty representative of how a lot of companies have written social insurance into their contracts.

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consumer prices since the base period, 1935-39. If you're not in one of the 34 cities surveyed, you can use the figure for a comparable city.

National Trend of Wages. The Bureau puts out, monthly, the average wages, weekly hours, and weekly earnings in manufacturing and nonmanufacturing, by industries.

Local Wage Rates. BLS has surveyed the wages for key jobs in about 25 industries that dominate local areas. Examples: iron foundries, furniture, cotton textiles, machinery. BLS is also surveying community wage structures in a few medium-size cities.

What Competitors Are Doing. Once a month, BLS puts out details of current wage settlements, classified by industries. The union involved is identified, too.

Contract Clauses. BLS is revamping a prewar bulletin on provisions of agreements. The new bulletin (No. 908), "Collective Bargaining Provisions," will have 30 chapters listing hundreds of sample clauses on 30 different contract points.

**Productivity.** BLS compiles outputper-man-hour data on many industries. Other figures show the number of manhours needed to produce certain prodnets.

Miscellaneous. The bureau surveys wages by jobs and regions in seven industries every year. Last year it also rounded up statistics on wages of clerical workers in 10 big cities; this year, it will resurvey five of the cities, will also cover 10 new ones. The bureau has started to gather data on wages and employment conditions of professional workers. Its first study—on registered nurses—came out a short while ago. It has also issued the first of a series of wage chronologies that list year-to-year changes in the bargaining agreements of particular companies.

You can get many of these bulletins and surveys simply by writing to Bureau of Labor Statistics, Dept. of Labor, Washington 25.

 Private Jobs—There's one more thing the bureau can do—for a fee. If you have a special research job, you might be able to get BLS to take it on for you.
 Revere Copper & Brass, Inc., and an independent union had one done on a comparison of living costs in Rome, N. Y., and in Baltimore. BLS charged them \$600 for the job.

The Pictures—© Fabian Bachrach—21; Al Bettinger—31, 32, 34; Arnold Eagle—39, 40; Art Haug—76, 79, 80; Bob Isear—107; Reni—114; John Swope—96; Wide World—24 (2).

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# INTERNATIONAL OUTLOOK

BUSINESS WEEK JUNE 18, 1949



There's more than meets the eye in Hoffman's fight for ECA funds.

Hoffman agrees with Congress that Marshall Plan dollars will buy more this year; that means—on paper—that less money can do the job.

But he also knows it isn't as simple as that. European sales to the U. S. are down. They were lower in the first quarter of 1949 than the last quarter of 1948.

It comes to this: While each ECA dollar buys more due to falling prices, Marshall Plan countries need more help because they aren't earning as much by trade with the U.S.

A big cut in ECA funds could mean  $\ddot{a}$  real drop in supplies going to Europe.

And Hoffman isn't keen on that—just when he's pushing Europe to plan for expanding trade.

The Treasury Dept. is still urging devaluation of the British pound. So is the International Monetary Fund.

What both are after is a general currency shakedown in western Europe. Until this comes, they don't see any chance for Europe's trade really to pick up. But as long as London holds out, of course, it's hard to get the other Marshall Plan countries to move.

Treasury and IMF officials think that a drop in the pound is only a matter of time. And they wonder if Cripps may not give way soon.

Their reasoning: General elections are due in Britain by next summer. If Cripps is going to devalue, he'll want to give himself time to recoup whatever prestige Labor loses.

From Cripps' angle, of course, it might be simpler to have the election first, let the pound slip later. U. S. experts in London figure it this way.

The State Dept. doesn't like the proposed Anglo-Argentine trade deal.

And State has said as much to both London and Buenos Aires.

The main part of the agreement is a five-year swap of Argentine meat for British coal and oil. But it covers British textiles and whisky, Argentine grain and linseed, too.

U. S. companies that would be frozen out have naturally squawked. American coal firms sold about 850,000 tons of coal to Argentina last year. Our oil companies filled a big part of petroleum needs.

What bothers the U. S. especially is the length of the agreement. The State Dept. might not blame the British for swapping on a yearly basis. But a five-year plan looks like a clear violation of British pledges to move toward freer trade.

It's another matter to get anything done about a thing like this. Argentina's dollar position is so bad that imports from the U.S. dropped below \$10-million in both February and March.

The British have decided they can't compete in the American mass car market.

By the end of this month, makers of low-priced cars, except Austin and maybe Ford, will call it quits.

May sales to the U.S. were only 200. (In January we bought 1,392

# INTERNATIONAL OUTLOOK (Continued)

#### BUSINESS WEEK JUNE 18, 1949

British cars.) A dribble like that can hardly cover advertising, much less sales and service.

The chances are, though, you will still be able to buy a Rolls-Royce, Jaguar, or an M. G. from dealers who specialize in swanky jobs.

#### Over all, the British export picture looked a little brighter in May.

Exports were about \$605-million, 10% above April.

That puts the average for the first five months at 150% of prewar. If this level holds through 1949, the government will be hitting its target.

But May imports hit a new high of \$780-million. Unless heavy seasonal buying figures in this, the export-import gap remains dangerously wide.

#### London financial circles are still gloomy.

They fear: (1) an export slump, (2) a new rash of wage boosts.

Of course, if higher wages came first, that would make the export slump just that much worse.

# <u>Critics of the government get some satisfaction out of the strike</u> troubles Britain is having.

With a national railway strike overhanging last week's Labor party conference at Blackpool, left-wingers didn't find much support for extreme nationalization schemes.

Rail union officials got nothing but scowls when they asked for worker management of the state-owned rail system.

And party members didn't seem too happy about plans for nationalizing insurance. Delegates from the British cooperatives are asking that the government's insurance ideas be toned down some.

#### Look for a \$100-million World Bank loan to India soon.

Most of the money will pay for U. S. and Canadian locomotives already on order.

But India's projected 1-million-ton steel plant will get cut in, too. (Koppers will help engineer this project.)

New Delhi hopes this loan won't be the last from the World Bank.

# Pemex, Mexico's government oil monopoly, is due for a \$50-million U.S. loan.

The money would provide a chance to get into big-scale exploration. (The Pauley-Davies group will do the drilling.)

The aim is to get Mexico back on the world oil map.

# Bethlehem Steel Corp. is now ready to tap Venezuela's rich ore. U. S. Steel is not far behind (page 121).

And the two steel firms may get to work soon on Brazil's Urucum manganese deposits. There's a chance they may do it as a joint venture.

U. S. government surveys a few years back put the Urucum deposits at 40-million tons. But there's a real transport problem. Urucum is about 1,000 miles inland from Rio de Janeiro. The only feasible route seems to be via the Paraguay River to an Argentine or Uruguayan port. Upstream, ocean vessels can't use this river, though. And even barges might be stopped by dry weather.

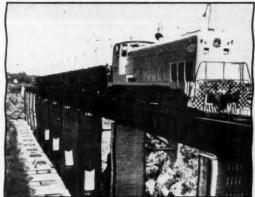
# BUSINESS ABROAD



El Pao iron mountain, 36 mi. from the Orinoco River in Venezuela, is the start of new ore-supply line for Bethlehem Steel Corp.

# Bringing Out Jungle Iron for U. S. Mills

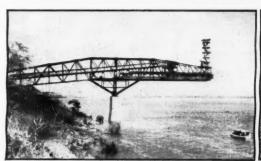
Bethlehem Steel Corp. will start hauling ore 3,000 mi. from Venezuela next fall. To get the iron out, company had to equip a railroad, set up a river landing, and build a new port.



**2** Ore moves from the mine by rail to river camp at Palua. There it goes into a battery of underground storage bins



3 Bins are on top of a "subway" conveyor. A pushbutton control empties the ore onto the moving belt



4 Conveyor hauls the ore to the river. A cantilever bridge that juts out 600 ft. over the stream is used to load barges



5 Ore goes from barges to ships at new port at Puerto Hierro. Ships moor at end of 800-ft. pier (TURN TO PAGE 122)



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# Prop for Venezuelan Economy

Country looks to iron ore to make it less dependent on oil. Bethlehem and U.S. Steel already have development concessions.

CARACAS—When the rainy season is over, late this fall, Bethlehem Steel Corp. engineers will start blasting the top off a mountain deep in the jungles of Venezuela.

• Mountain of Ore–By the middle of next year, the top of the mountain will have traveled 3,000 mi. to the U.S. on trucks, conveyor belts, ore cars, barges, and freighters. Bethlehem will have spent nine years and an estimated \$50-million to do it. But chances are future profits will prove the wisdom of the venture. The top of this particular mountain is almost pure iron–72% content at some points.

Venezuelans have known since 1933 that their country had big reserves of iron ore. (Reported reserves are 300-million tons; by comperison, high-grade reserves in Minnesota's Mesabi range total well over a billion tons.) Ever since then they have been nudging American companies to look beyond the next hill for new deposits. But until recently, there has been hot debate—not over the existence of the ore, but over the possibility of hacking it out of the dense jungle and of opening up transportation lanes to the sea.

• U. S. Goes In—U. S. steel companies, though, know the reserves of the Mesabi have begun to dwindle. So they couldn't ignore for long the chance of bringing in new supplies from Venezuela. Bethlehem, through its subsidiary, Iron Mines Co. of Venezuela took the first plunge back in 1941. Bethlehem got a 20,000-acre concession about 100 mi. cast of Ciudad Bolivar, capital of the state of Bolivar (map). The main attraction in the concession was the fabulous El Pao iron mountain near the jungle settlement of San Felix.

Last year U.S. Steel Corp., after a long investigation, took six concessions, covering almost 75,000 acres south of Ciudad Bolivar. Geologists from Big Steel's subsidiary. Oliver Iron Mining Co., are still surveying the ground. U.S. Steel has its concession even farther in the jungle than Bethlehem; so it will have an even tougher transportation problem.

Two newcomers to the country-Republic Steel Corp. and Jones & Laughlin Steel Corp.—are reported to be sounding out the Venezuelan Ministry of Development for concessions. Ex-



MINING CONCESSIONS have already hared two U. S. companies to Venezuela; more may come soon

perts from both companies are in Cara-

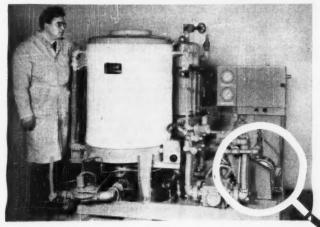
• A Change From Oil—To the Venezuelans, the response from U.S. steel companies has been most welcome. They are anxious for iron-ore development, as a way of making the country less dependent on oil.

Venezuela's phenomenal oil boom, which has so far attracted more than \$2-billion in foreign capital, has put the country on the road to prosperity. Taxes and royalties on oil have earned the Venezuelan government \$1.1-billion over the past six years. Last year oil income made up more than two-thirds of the Venezuelan government's revenue. With 9-billion bbl. of proved reserves still untapped, Venezuela is in a position to count its chips for many years to come.

But the country's close tie to the world oil price (99% of Venezuela's oil is exported) has its disadvantages. Venezuelans are beginning to see signs of them now. Oil production last year averaged 14-million bbl. a day. Falling world demand is expected to bring cutbacks to about 1-million bbl. a day before the end of this year.

Iron-ore development would be the best diversification possible for the Venczuclan economy. It could be the harbinger of a steel industry and the industrial revolution—not only in Venezuela.

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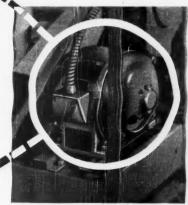
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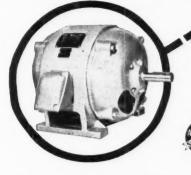
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but in much of the rest of South America as well.

• Good Deal—Terms granted to U.S. steel investors parallel those the oil companies got. And that makes them about as liberal as you can find anywhere. In the past six years the 12 oil companies operating in Venezuela have paid 5444-million in dividends to their shareholders. (Biggest operators: Creole Petroleum Corp., which has 45% of the foreign concessions; Royal Dutch Shell with 32%; and Mene Grande Oil Co., owned by Gulf, with 17%.)

In general, the steel companies may take out a certain amount of ore with no obligations. After they reach that amount, profits on each concession are split 50-50 with the Venezuelan government. The government has promised to do its best to help the mining operations with road and river projects. (One job the Venezuelans would like to tackle is dredging the Orinoco River to handle ocean-going traffic. This is a stupendous undertaking. But it would open up the whole river valley to farming and industry.)

• Master Plan—Venezuela's Ministry of Development points to the Bethlehem project as a model of what it hopes the other steel companies will do. It has good reason. The story of the El Pao iron mountain is an engineering drama.

El Pao was just jungle when Bethlehem engineers invaded in 1941. Then Bethlehem hired the Gahagan Construction Corp. of New York to start building. Now it is a thriving community connected by Venezuela's only standard gage railroad (U. S. built) with the Orinoco River, 36 mi. to the north. Beside the railroad is a two-lane dirt highway which links El Pao with the river camp, Palua.

• Getting It Out—When Bethlehem begins mining this fall the focus will shift to a battle of machines against the mountain. The company will use huge electric shovels with a 4½ cu, yd. bite to peel the ore off the mountain. Trucks will take the ore from the shovels and trundle it half way down the mountain to the first of two ore crushers. From the first crusher, a conveyor belt takes over; it takes the ore to a second crusher at the railhead at the foot of the mountain.

Bethlehem has four 1,500-ton dieselelectric locomotives and 100 70-ton hopper cars to get the ore down the line to Palua. The last link of the railroad isn't finished yet. It's the bottleneck right now.

At Palua the railroad runs onto a concrete viaduct over a battery of underground ore bins about 600-ft. long. The bins have a storage capacity of 35,000 tons

• Conveyors and Barges.—The storage bins are on top, of an underground conveyor system that runs through a tunnel big enough for a subway train. At the push of a button a Bethlehem engineer can feed ore from the bins to the conveyor system at any rate he wants. The conveyor hauls the ore to the river where 4,000-ton barges take over. To load the barges, Bethlehem has built a cantilever loading bridge that juts 600 ft. out over the river.

A 36-hr. ride down the river brings the ore to Bethlehem's transshipping point, Puerto de Hierro, on the southern shore of the Paria peninsula.

• Beach to Port—As fate as July, 1947, this peninsula slept peacefully under the tropical sun. It has had little excitement since Christopher Columbus stopped by in 1489. Then Bethlehem hired Frederick Snare Corp.. New York engineering firm, to build an ore port. They started with nothing but a sandy beach: today the engineers are well along on a port that will handle 24,000-ton occangoing vessels.

The port won't be ready until next year. Meanwhile Bethlehem will stockpile ore both at Palua and Puerto de Hierro. Puerto de Hierro can handle about 1-million tons of ore; more storage space is planned for Palua.

When Puerto Hierro gets going, it will be able to transship some 2-million tons of ore annually.

• Good Neighbors-Altogether Bethlehem employs about 1,400 Venezuelans and Americans for its project. For both nationals, the U.S. company provides good living accommodations. All U.S. companies in Venezuela know this is a public-relations must—especially in politically volatile Latin America.

U.S. business has kept on the right side of Venezuelan governments over the years. The present one is no exception. Most U.S. businessmen in Latin America can't afford to bow out each time a government changes, even if it's by a military coup.

• Army Revolt—Last November three young colonels from the Venezuelan army tossed out of office Venezuela's poet-president Romula Gallegos. Gallegos lead a pro-labor government, tried to set a new high in developing a constitutional structure for a Latin American country.

Gallegos' Accion Democratica party has been outlawed. Gallegos is in exile and many of his party leaders are in jail. The local press is still muzzled; constitutional processes aren't yet restored.

Despite the change in government, U.S. business operations hardly broke their stride. One of the military junta's first acts was to assure U.S. businessmen that it would respect their property.

that it would respect their property.

By this fall, with the U.S. State Dept, pushing all the way, elections will probably be held in Venezuela. The junta's candidate (probably Ruben Corredor, who, last week, resigned as Minister of Labor) is expected to win.

# Tools on Credit

New corporation set up by 11 U.S. machine-tool builders has a \$3-million Ex-Im Bank credit to finance Latin American sales.

Machine-tool sales-both domestic and for export-are traditionally made on a cash basis. But it's pretty tough these days for American manufacturers to do a cash export business. So this week, 11 machine-tool builders set up a corporation through which they can do a credit export business-with very little risk, because they have a \$3-million revolving credit from the Export-Import Bank

• Financing Plan-The new Ohio corporation is Amertool Services, Inc. It will operate in Latin America. Here's how its financing plan will work:

(1) Each of the 11 member compames will sell individually, as always

(2) On sales financed by Amertool, a eash down payment of at least 25% will be required: the other 75% will be in notes extending over two years. Notes will be paid off in quarterly instalments; interest is not to exceed 5% a year.

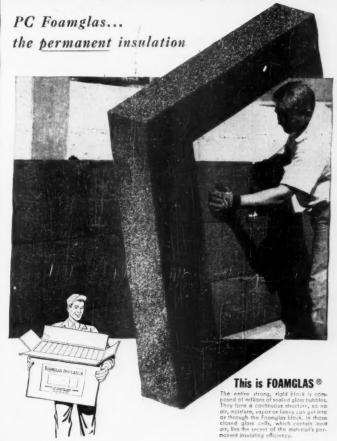
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# ECE Trade Expert

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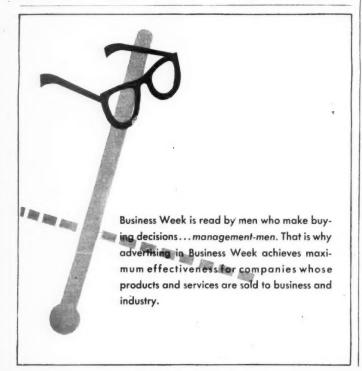
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# ECA'S LEDGER

Marshall Plan countries want to put \$592.4-million into petroleum equipment in the next year (July, 1949, to June, 1950). And they would like to spend \$211.6-million of that in the "dollar area" (almost all in the U.S.). Purchases by U.S.-owned subsidiaries operating in Europe and by joint U.S.-British ventures overseas are included in the totals.

• Report Series—These figures are in a petroleum report issued this week by ECA—one of a series of commodity-breakdown reports covering fiseat 1950. So is the little-publicized fact that ECA is ready to finance purchases by American-owned companies in the same way it finances European-owned firms. For example, a U.S. oil company in France that meets ECA's requirements can have its U.S. purchases covered, then pay the French government in francs. The theory behind this is that our companies in Europe are subject to the

same trade and exchange restrictions as local firms.

Of the \$211-million to be spent in the western hemisphere, \$108-million will be for equipment to be used in participating countries, \$32-million in their overseas territories, and \$72-million for use in their holdings in nonparticipating countries.

participating countries.

• Planned Spending—Here are figures on the planned spending on some of the major types of equipment (figures

in millions of dollars):

	Dollar Sources	Nondellar Sources	Total
Drilling	\$53.7	851.7	\$105.4
Well-casing	13.8	17.1	30.9
Storage	15.3	81.0	96.3
Postines	2.6	40.9	43.5

#### Other Developments

Shipping "50-50": Paul Hoffman has laid down the law on adherence to the ECA "50-50" shipping clause. Here's how it goes:

(1) At least 50% by volume of ECAfinanced commodities must be carried in U.S. flag ships whenever these are available at the market rates set by the Maritime Commission "for U.S. flag vessels."

(2) This also applies to commodities bought abroad out of 5% counterpart funds and shipped to the U.S.

(3) Tonnages are to be computed separately for dry bulk carriers, cargo liners, and tanker services.

(4) ECA will try to secure for U.S. ships a fair share, though not necessarily a 50-50 share, by geographic areas.

The whip that Hoffman holds, to make sure FCA countries live up to these requirements, is the dollar. ECA won't reimburse Marshall Plan countries for shipping costs on the amount of cargoes by which they fall short of the "50-50" provision.

#### BUSINESS ABROAD BRIEFS

Pakistan Tobacco Co. expects to have its Karachi factory in production by the end of the year. This subsidiary of the British-American Tobacco Co. also plans another factory in Karachi.

Mexico's No. 1 steel mill, Fierro y Acero de Monterrey, is launching a \$2-million expansion program. It wants to step up production of sheet-iron products by 30,000 tons a month, produce larger amounts of railroad equipment.

A new Dutch company has been set up by three National Lead Co. subsidiaries producing titanium pigments. Chief stockholder: Titan Co., Inc., of Delaware. The other two are Norwegian and Belgian subsidiaries.

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# Industry's Stake in the AEC Investigation

In Washington this week the congressional Joint Committee on Atomic Energy is giving the atom program a formal going over—its first since the hearings two years ago on confirmation of David Lilienthal and his col-

leagues on the Atomic Energy Commission.

Businessmen would do well to keep a close watch on this investigation. Properly conducted, it could throw badly needed light on a subject of immense potential importance to industry. Even more significant: The tone, the manner, in which the investigation is conducted will influence for years ahead the decision on whether atomic energy is to be absorbed into the economic life of the country or is to remain indefinitely a little island isolated from the main stream of industrial development.

This is an altogether appropriate time for a searching examination of AEC's record. Atomic energy has been in civilian hands for nearly three years now. By now the commission has emerged—or should have emerged—from

the confusion of getting organized.

From the beginning, Business week has kept in touch with the atomic-energy program. It is our impression that the program is in good shape (BW—Apr.30'49,p67), that the commission can emerge with credit from any inquiry into its over-all record. But only a complete investigation backed by the resources of the congressional joint committee can inspire confidence.

#### On the Wrong Track

We are somewhat disturbed by the course which the investigation has taken so far.

For one thing, it is still by no means certain that the committee will undertake a job of the scope that is needed. The AEC commissioners have urged an examination of their total record. They are supported in this by Sen. McMahon, chairman of the committee.

But Sen. Hickenlooper, the ranking minority member, disagrees. It was his charge of "incredible mismanagement" which precipitated the inquiry; and he wants to limit the investigation to the specific instances of "mismanagement" which he proposes to bring forward.

It seems to us perfectly obvious that no management record can be judged except in terms of its total results, its payoff. It is useless to condemn specific decisions unless they are weighed against the over-all problem. Sen. Hickenlooper argues, however, that a broad investigation would endanger the secrecy of the atomic program.

The senator's use of this argument, we submit, raises one of the most difficult problems of atomic policy. The inflexible insistence on an absolute and total secrecy seems to us a real danger to the national security.

The same narrow conception of secrecy is central to most of the detailed charges which Hickenlooper, so far, has preferred against Lilienthal. For example: AEC's willingness to build up its staff faster than the FBI could complete loyalty checks; its waiver of security clearance for recipients of AEC-financed fellowships in non-secret branches of science; its overseas shipments of radioactive isotopes.

We do not attempt to judge the merits of these particular charges. But we are convinced of this: The mere fact that they obviously involve deviations from complete secrecy is not in itself proof of mismanagement—not until the deviation is weighed against the results sought.

#### What Keeps Industry Out

Businessmen, like all citizens, want to see the U.S. gain the maximum in security from its development of atomic energy. They recognize that the U.S. monopoly of the atom bomb can last at best only two, three, five, or so years more. Nevertheless, they want to see that monopoly last as long as possible, would oppose unnecessary release of information which might significantly shorten it.

But better than most citizens, perhaps, businessmen realize what the U.S. is up against—once its monopoly is ended. If the U.S. is still to maintain its atomic lead—if it is to be ready to meet any challenge with maximum atomic strength—then atomic energy must become an

integral part of industry generally.

The guns which fought the last war, businessmen know, were not made in arsenals. They were made in privately owned factories which, for years, had been applying to production of commercial goods the same precision, the same techniques which the arsenals needed. Similarly, U. S. atomic strength, once the monopoly is gone, will depend on the extent to which atomic knowledge and atomic techniques have permeated industry.

It is unfortunate that there is today no strong economic incentive for industry to force its way into the atomic field. Profits from atoms are still some years away—and in the absence of the profit drive, secrecy is the strongest barrier to general industrial participation.

There are two schools of thought on atomic secrecy. One says: Any information in any way connected with atomic energy is potentially helpful to foreign progress. Therefore the only safe course is to keep everything secret that you possibly can.

The other says: Secrecy is an evil, though sometimes a necessary one. True, when we keep an atomic fact secret, we slow foreign progress—but we also slow our own. In each specific case, the gain from secrecy must be

weighed against the very real losses.

In recent months, AEC has clearly been mustering its courage to move from the first position to the second. That progress will certainly be halted if the present investigation ends—as it has begun—on the note that complete secrecy is the only virtuous course for an atomic administrator.

That would be a bad omen for industry's hopes for an eventual prominent place in atomic energy. And it would be a threat to the security of the country.



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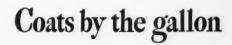


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